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No. 08-___

IN THE

Supreme Court of the United States

ISLANDER EAST PIPELINE COMPANY, L.L.C.,
Petitioner,

v.

GINA MCCARTHY, COMMISSIONER OF THE STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,

and

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit

PETITION FOR A WRIT OF CERTIORARI

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QUESTIONS PRESENTED

This case involves two separate, but interrelated regulatory schemes, the Natural Gas Act (NGA) and the Clean Water Act (CWA), and the line separating Federal and state jurisdiction over the construction of interstate natural gas pipelines. Such pipelines must obtain (1) an NGA certificate from the Federal Energy Regulatory Commission (FERC) that the pipeline is required by the public convenience and necessity and is environmentally acceptable; and (2) a CWA § 401(a) certification from each affected state that any discharges into state waters will not have a significant adverse effect on the state's water or water quality. Congress amended the NGA in 2005 to permit pipelines to obtain Federal review of state agency § 401(a) decisions that veto the construction of pipelines certificated by FERC on a basis inconsistent with Federal law. A Federal court of appeals must vacate a state agency denial of a § 401(a) permit if the denial is "inconsistent with the Federal law governing such permit."

The Questions Presented are:

> What is the "Federal law" governing a state agency's decision whether to issue a § 401(a) permit, and is it "inconsistent" with that law for a state agency to use its § 401(a) process to:
>
> > (a) regulate issues that fall within FERC's exclusive regulatory authority under the NGA, such as the pipeline's route and appropriate construction methods; and
> >
> > (b) refuse to defer to findings made by FERC in its final Orders when the state agency participated in the extensive environmental review conducted by FERC?

PARTIES TO THE PROCEEDING

The parties to the proceeding before the United States Court of Appeals for the Second Circuit were: Islander East Pipeline Company, L.L.C., the petitioner below, and Gina McCarthy, the Commissioner of the State of Connecticut Department of Environmental Protection, and the State of Connecticut Department of Environmental Protection, the two respondents below.

RULE 29.6 CORPORATE DISCLOSURE STATEMENT

Islander East Pipeline Company, L.L.C. is a limited liability company formed under Delaware law. Its members with equal ownership rights are Spectra Energy Islander East Pipeline Company, L.L.C. and National Grid Islander East Pipeline L.L.C.

National Grid Islander East Pipeline L.L.C. is a wholly owned subsidiary of Seneca Upshur Petroleum, Inc., which is a wholly owned subsidiary of National Grid Development Holdings Corp., which is a wholly owned subsidiary of KeySpan Energy Corporation, which is a wholly owned subsidiary of KeySpan Corporation. KeySpan Corporation is a wholly owned, direct subsidiary of National Grid USA. National Grid USA is an indirect, wholly owned subsidiary of National Grid plc, a public limited company incorporated under the laws of England and Wales.

Spectra Energy Islander East Pipeline Company, L.L.C. is a wholly owned subsidiary of Spectra Energy Transmission, LLC, which in turn is a wholly owned subsidiary of Spectra Energy Enterprises Corporation, which in turn is a wholly owned subsidiary of Spectra Energy Capital, LLC, which in turn is a wholly owned subsidiary of Spectra Energy Corp.

Spectra Energy Corp. and National Grid plc are publicly held companies.

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PETITION FOR A WRIT OF CERTIORARI

Petitioner Islander East Pipeline Company, L.L.C. (Islander East) respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Second Circuit denying Islander East's Petition for Review.

OPINIONS BELOW

The opinion of the Second Circuit denying Islander East's Petition for Review (*Islander East II*) is reported at 525 F.3d 141 and reprinted at 1a-60a. The

Second Circuit's unreported denial of rehearing and rehearing en banc issued June 20, 2008 is reprinted at 448a-449a.

The opinion of the Second Circuit granting Islander East's prior petition for review (*Islander East I*) is reported at 482 F.3d 79 and reprinted at 174a-243a. The Connecticut Department of Environmental Protection (CTDEP) decision after remand, denying Islander East's water quality certification (*Denial II*), as well as its earlier denial (*Denial I*), are unreported and included at 61a-173a and 244a-257a. The Orders of the Federal Energy Regulatory Commission (FERC) are reported at 102 FERC ¶ 61,054 and 100 FERC ¶ 61,276 and reprinted at 258a-352a and 353a-447a.

JURISDICTION

The Second Circuit issued its opinion in *Islander East II* on May 2, 2008 and denied Islander East's timely petition for panel rehearing and rehearing en banc on June 20, 2008. This Court has jurisdiction under 28 U.S.C. § 1254(1). The Second Circuit had jurisdiction under 15 U.S.C. § 717r(d) (461a-462a).

STATUTORY PROVISIONS AND REGULATIONS INVOLVED

The pertinent provisions of the NGA, 15 U.S.C. § 717, *et seq.*, the CWA, 33 U.S.C. § 1251, *et seq.*, the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, applicable Federal regulations, and Connecticut's Water Quality Standards and antidegradation policy are set out in the Appendix hereto at 450a-503a.

INTRODUCTION

Granting the petition will afford the Court the opportunity to answer two related, and equally important, questions: (1) where did Congress draw the jurisdictional line between FERC's comprehensive authority to regulate interstate natural gas pipelines under the NGA and a state agency's power to prevent construction of a FERC-certificated pipeline under § 401(a)(1) of the CWA, 33 U.S.C. § 1341(a)(1) (478a-479a), and (2) what is the "Federal law" governing a state agency's issuance of a § 401(a) permit for an interstate pipeline, and when does the agency act "inconsistent[ly]" with that law, within the meaning of § 19(d) of the NGA, 15 U.S.C. § 717r(d) (462a).

The answers to these questions are of paramount importance not only to Islander East, but also to the tens of thousands of residential and industrial energy consumers in New York who would be served by the Islander East pipeline. In its Orders granting Islander East the certificate needed to build its pipeline, FERC found that the pipeline would provide increased access to natural gas for life-sustaining uses such as heating and cooking, and for fueling new electric generation projects. (289a-291a, 304a-305a.)

These issues are also critical to the natural gas industry and energy consumers nationwide – including those that would be served by future pipeline projects – as well as to America's energy security and environment. As the legislative history of the 2005 NGA amendments shows, the Islander East case is not unique. Congress amended the NGA because it was concerned about the increasing efforts of state agencies to block projects that FERC had determined were necessary to serve critical interstate energy needs. This Court's resolution of these issues will enable the

natural gas industry to assess the legal and regulatory risks of committing to develop new capital-intensive infrastructure projects, and affirm the important role natural gas delivered by pipeline will play in alleviating the nation's energy security and global warming concerns.[1]

The Court's consideration of these matters will also address a question akin to one left unanswered in *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700 (1994). The issue confronting the Court there was whether a state had power under CWA § 401(d), 33 U.S.C. § 1341(d) (483a-484a), to impose conditions that *might* conflict with FERC's licensing power under an analogous comprehensive regulatory scheme, the Federal Power Act, 16 U.S.C. § 791a, *et seq.* (FPA). In *PUD No. 1*, the Court acknowledged that it had previously held that a state agency could not impose conditions that conflicted with a FERC license. 511 U.S. at 722. The Court found in *PUD No. 1* that, because FERC had not yet acted, any conflict between FERC's authority and the state's was "hypothetical." *Id.* at 723. Here, the conflict between FERC and state authority is real, immediate, and deserving of the Court's attention.

STATEMENT OF THE CASE

Islander East's seven-year odyssey to obtain approvals (successfully) from FERC and New York, and (unsuccessfully) from Connecticut for its interstate natural gas pipeline is briefly recounted below.

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[1] Natural gas is a cleaner burning fuel than many other fuels such as fuel oil and coal, which are often used as alternatives if natural gas is not economically available.

A. FERC Issues A Certificate Of Public Convenience And Necessity To Islander East

In June 2001, Islander East applied for a FERC certificate of public convenience and necessity under the NGA, authorizing it to construct and operate a natural gas pipeline from Connecticut, under Long Island Sound, to Long Island, New York, which is currently served by only one natural gas pipeline, Iroquois Gas Transmission System, L.P. (Iroquois). (259a, 262a.)

1. The FERC Environmental Review Process

As NEPA requires, FERC took a hard look at the reasonably foreseeable environmental effects of certificating the proposed pipeline. *See* 42 U.S.C. § 4332 (486a-489a); (401a-402a, 405a-406a). FERC Staff, with the assistance of a multi-disciplinary expert environmental consulting firm, led an in-depth environmental review. That review included New York and Connecticut site visits; meetings with interested Federal, state, and local agencies in New York and Connecticut; and the consideration of comments from landowners, state and local agencies, and environmental groups in both states. FERC Staff issued a draft Environmental Impact Statement (EIS) that analyzed the environmental impacts of the proposed pipeline and considered various alternative routes for both its land and water segments. *See* Islander East Pipeline Project Final Environmental Impact Statement at ES-3 to ES-4, 1-2 to 1-3. FERC requested comments on the draft EIS, held additional public meetings in New York and Connecticut, and received comments from six Federal agencies, eight state agencies – including CTDEP and the Connecticut Attorney General – five county and municipal

entities and more than eighty groups and individuals. *Id.* at 1-3.

FERC Staff subsequently issued a final EIS (FEIS) that FERC ultimately adopted. The FEIS concluded that "construction and operation of the [Islander East pipeline] will result in a limited adverse environmental impact" and, if constructed and operated in accordance with the detailed mitigation measures recommended in the FEIS, "would be an environmentally acceptable action," with "limited, but acceptable, environmental costs." (400a; 291a-292a.) FERC concluded that "the Islander East Pipeline project, if constructed and operated in accordance with the recommended and proposed environmental mitigation measures, is environmentally acceptable." (404a-405a.)

2. Connecticut's Active Participation in the FERC Proceedings

Connecticut officials participated in the FERC proceedings and raised specific concerns about the impact of pipeline construction on shellfish habitat. FERC considered these concerns and addressed them in the FEIS and its Orders. (408a-410a; 332a-337a.) Recognizing the importance of Connecticut's shellfishing industry, FERC conducted a detailed, site-specific examination of the proposed pipeline route, the proposed construction methods (including the use of anchors and anchor cables), potentially affected shellfish leases, and the likelihood that any shellfish habitat or shellfishing activities affected would recover. FERC approved the proposed route and construction methods, requiring Islander East to implement a number of environmental measures that FERC concluded "would effectively reduce and

minimize impacts on commercial fishing activities to an acceptable level." (*See* 409a-410a; 435a-438a.)

3. FERC's Issuance of a Certificate of Public Convenience and Necessity

FERC granted a certificate of public convenience and necessity to Islander East on September 19, 2002. After considering requests for rehearing, FERC confirmed its Order on January 17, 2003 (Rehearing Order). In its Rehearing Order, FERC found that:

1. The pipeline would "increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources with increased availability of gas for anticipated electric generation projects" (290a);
2. The pipeline would "introduce pipeline-to-pipeline competition to eastern Long Island markets" (*id.*);
3. "[T]he filings made by Islander East's proposed customers and the New York PSC emphasiz[ed] the need for a totally separate [S]ound crossing to provide contingency protection for both gas and electric systems against a total loss of supply if damage were to occur to the Iroquois line" (291a);
4. "[D]isruption of existing firm service from Iroquois for any significant period could require [utilities] to curtail service to approximately 124,000 customers on Eastern Long Island" (*id.*); and
5. Such disruption "would have a significant and possibly disastrous impact." (*id.*; *see* 304a-305a).

4. CTDEP and the Connecticut Attorney General Petition the D.C. Circuit for Review of the FERC Orders

CTDEP and the Connecticut Attorney General, the statutory representative of CTDEP, each petitioned for review of FERC's Orders in the D.C. Circuit. The D.C. Circuit dismissed CTDEP's petition for lack of jurisdiction. The Connecticut Attorney General subsequently dismissed his petition voluntarily. (181a-182a n.5.)

B. Islander East Obtains A § 401(a) Permit From New York, Only To Have Connecticut Refuse To Issue A Permit

Because construction of the Islander East pipeline might "result in a discharge into the navigable waters" of New York and Connecticut, § 401(a) required Islander East to obtain certifications from New York and Connecticut that any discharge was consistent with those states' water quality standards (WQS) before beginning construction under its FERC certificate. New York granted Islander East's application for such a certification in 2003. (182a.)

Islander East filed its § 401(a) application for a certification from Connecticut with CTDEP on February 13, 2002. CTDEP denied the application on February 5, 2004 in a six-page decision, *Denial I*.

C. The Second Circuit Vacates CTDEP's Denial Of Islander East's § 401(a) Application

Congress, in order to "help get projects, like the Islander East natural gas pipeline, constructed,"[2]

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[2] *Regional Energy Reliability and Security: DOE Authority to Energize the Cross Sound Cable: Hearing Before the Subcomm. on Energy and Air Quality of the H. Comm. on Energy and*

amended the NGA to provide for Federal circuit court of appeals review of state agency § 401(a) denials such as CTDEP's. *See* 15 U.S.C. § 717r(d)(1) (461a-463a).[3] Islander East filed a petition for review of *Denial I* in the Second Circuit on August 8, 2005, the day the 2005 amendments became effective.

The Second Circuit granted Islander East's petition for review and vacated *Denial I* as arbitrary and capricious. The court of appeals was disturbed by "the surprising brevity of the agency's analysis relative to the voluminous and complex record, and documentary evidence suggesting that [CTDEP] had pre-determined to oppose the pipeline project under any circumstances." (*See* 16a-17a (citations and footnote omitted); *see also* 218a-220a.) The evidence suggested to the court that issuance of *Denial I* "had become more a matter of 'strategy' in opposing the pipeline than of fact-finding." (219a.)

The court admonished CTDEP that any effort on remand "to pursue a 'strategy' to justify a foreordained opposition to the pipeline would be incompatible with a reviewing agency's mandate to use its expertise to come to a reasoned decision." (220a.) The court accordingly instructed CTDEP to "conduct the sort of complete and reasoned review required by law." (*Id.*)

Commerce, 108th Cong. 8 (2004) (statement of Rep. Joe Barton, Chairman, H. Comm. on Energy and Commerce).

[3] Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594, 689-90 (2005).

D. On Remand, CTDEP Again Denies Islander East's Application

CTDEP did not take any additional evidence on remand, but relied on its existing record, which included the FERC FEIS and Orders. It issued the 81-page *Denial II* on December 19, 2006. (61a-173a.) CTDEP did not find that the project would have a significant adverse effect on the surrounding water or its quality. CTDEP focused instead on impacts to the seafloor, concluding that pipeline construction would be inconsistent with Connecticut's antidegradation policy because it would result in the "loss" of existing and designated "uses" of affected waters, in this case shellfish habitat and shellfishing.

E. The Second Circuit Denies Islander East's Petition For Review Of *Denial II*

Islander East petitioned the Second Circuit for review of *Denial II*. Over a vigorous dissent, the court denied the petition. The majority essentially ignored Islander East's arguments that *Denial II* is inconsistent with FERC's findings that the impacts of construction on shellfish habitat and the shellfishing industry would be largely temporary and could be acceptably minimized. It also rejected or ignored Islander East's arguments that *Denial II* is inconsistent with the CWA, the Environmental Protection Agency's (EPA's) regulations and guidelines, and CTDEP precedent, and thus "inconsistent with the Federal law governing such permit." The Second Circuit did not find that pipeline construction would result in significant adverse effects on water or water quality or any species. Nonetheless, it chose to let *Denial II* stand on the ground that some of the admit-

tedly conflicting evidence[4] supported CTDEP's findings that Islander East's use of anchors and anchor cables would cause the "loss" of shellfishing "over an unacceptably large" 1,120-acre area. (21a, 28a-29a, 47a, 57a.) It stated that its conclusion was further supported by CTDEP's concerns about the proposed restoration of 5.5 acres of seafloor with small rocks and sand (engineered backfill) used to cover the pipeline in an area where material from the trench would be hauled away to prevent sedimentation. (12a, 34a-35a.) In so doing, it sanctioned CTDEP's use of Connecticut's antidegradation policy for the sheer purpose of blocking the construction of the pipeline along the route certificated by FERC, and permitted it to function in a province reserved exclusively to FERC.

The majority conceded that its ruling would allow Connecticut to block construction of the pipeline, and acknowledged that such an outcome might be undesirable. It chose to express "no view as to the wisdom of the challenged denial or of a statutory scheme whereby a single state agency effectively vetoes an energy pipeline that has secured approval from a host of other federal and state agencies." (46a.)

In dissent, Judge Restani found the majority's reliance on the more "voluminous" information CTDEP included in *Denial II* to miss the point – the quality, not the quantity, of the information was what mattered. The dissent stressed that *Denial II* contained information that was "erroneous, dismissed by the agency without adequate explanation, or fails to fully explain the agency's decision." (60a.) Judge Restani concluded that the evidence continued to suggest bias

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[4] (24a, 26a; 203a-208a, 216a-217a.)

and predetermination on Connecticut's part, and that "the inconsistencies in the reasoning, CTDEP's failure to consider relevant evidence on the record, and the manifest errors in the evidence relied upon" compelled the conclusion that *Denial II*, like *Denial I* before it, was "arbitrary and capricious." (*Id.*)

REASONS FOR GRANTING THE PETITION

This case raises a question of fundamental importance to citizens of states who use natural gas to cook and heat and cool their homes and businesses, or who use electricity generated by gas, but can only obtain it via pipelines that pass through other states. That question is the degree of control an agency in one state can have over construction of vital interstate natural gas pipelines crossing navigable waters (as most do) to serve consumers and businesses in another state.

Congress vested FERC with exclusive jurisdiction to certificate interstate natural gas pipeline projects that are in the public interest, and to approve their routes and construction techniques to ensure they are routed and built in a safe and environmentally acceptable manner. When Congress amended the NGA in 2005, it reaffirmed FERC's paramount jurisdiction. Congress did not, however, amend the CWA to expand the important, but circumscribed, role for state environmental agencies. That role is limited to determining whether discharges into the state's navigable waters from the construction and operation of a pipeline would have a significant adverse effect on water or water quality. To ensure that state agencies stay on their side of the jurisdictional line and do not invade FERC's exclusive jurisdiction, Congress directed the courts of appeals to vacate a state agency

denial of a § 401(a) permit for a Federally approved pipeline project if the denial rests on reasons that are "inconsistent with the Federal law governing such permit." Congress did not define "Federal law," leaving it to the courts of appeals to interpret it. The term should be construed in context, with a view to the overall statutory scheme. *See Nat'l Ass'n of Home Builders v. Defenders of Wildlife*, 127 S. Ct. 2518, 2534 (2007). That scheme includes the text and purpose of the CWA, EPA's regulations and guidelines, the comprehensive Federal scheme established by the NGA, and the specific determinations made by FERC – after extensive environmental review – in its orders certificating a project.

By failing to consider the overall statutory and regulatory scheme applicable here, and failing to decide whether CTDEP's denial was "inconsistent" with applicable Federal law, the Second Circuit opened the door Congress thought it had shut in 2005. Congress amended the NGA because certain states, including Connecticut, were misusing authority delegated under § 401(a) to prevent or delay the construction of projects, like Islander East, that FERC had found to be in the public interest. One FERC official testifying before Congress explained that natural gas projects regularly confront "a series of sequential administrative and state court and Federal court appeals that can kill a project with a death by a thousand cuts."[5] He warned that this would soon "get to the point where the first dollar will not be invested" because pipelines "will not . . . develop infrastructure

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[5] *See Natural Gas Symposium: Symposium Before the S. Comm. on Energy and Natural Resources*, 109th Cong. 40-41, 42 (2005) (hereinafter "*Natural Gas Symposium*") (statements of Mark Robinson, Director, Office of Energy Projects, FERC).

because they do not know what the process is going to be like and how long it is going to take."[6]

The Court should grant the petition to decide whether the phrase "inconsistent with the Federal law governing such permit" must be read not only in the context of the CWA and Federal and state regulations and decisions issued under the CWA, but also in the context of the comprehensive scheme of natural gas pipeline regulation established under the NGA, FERC's paramount power over pipeline route and construction methods, and the FERC record, including the FEIS and FERC Orders. As shown below, it is inconsistent with Federal law for a state agency, like CTDEP, to use the § 401(a) permitting process to attempt to regulate issues falling within FERC's exclusive jurisdiction, such as a pipeline's route and construction methods, and to fail to defer to FERC's findings on those matters, reached after an extensive environmental review in which the state agency itself participated.

I. THIS COURT SHOULD GRANT CERTIORARI TO PROTECT FERC'S AUTHORITY TO EFFECTIVELY ADMINISTER THE NGA IN THE INTERESTS OF CONSUMERS NATIONWIDE

A. FERC Has Exclusive Jurisdiction Over Interstate Natural Gas Pipelines, Including Their Routes And Construction Methods

The NGA gives FERC comprehensive and exclusive regulatory authority over the transportation of natural gas in interstate commerce, including the routes

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[6] *Id.* at 46.

of, and construction methods used to build, interstate natural gas pipelines. 15 U.S.C. § 717(b) (450a); *see Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300-01 (1988). Congress gave FERC this sweeping power so that a Federal body could make choices in the interests of energy consumers across the country, and not just in the parochial interests of a single state. *Nat'l Fuel Gas Supply Corp. v. Pub. Serv. Comm'n*, 894 F.2d 571, 579 (2d Cir. 1990).

Congress reserved to FERC the power to decide what construction techniques should be used to ensure that pipelines are constructed in a safe and environmentally acceptable manner. FERC issues a certificate to an interstate natural gas pipeline only if FERC determines that the proposed pipeline "is or will be required by the present or future public convenience and necessity" under the NGA. 15 U.S.C. § 717f(e) (454a-455a). "FERC may attach 'to the issuance of the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require,'" including conditions to protect the environment affected by construction activities. *See Schneidewind*, 485 U.S. at 302 (quoting 15 U.S.C. § 717f(e)).[7]

In deciding whether to grant a certificate, FERC must comply with NEPA, which requires a thorough and comprehensive environmental review. FERC examines the environmental impacts of and alternatives to the pipeline and its route, including not building the pipeline at all. FERC has traditionally

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[7] FERC may also deny a certificate to a project that it finds is not in the public interest or cannot meet conditions essential to public safety or the environment. *See, e.g., KeySpan LNG, L.P.*, 112 FERC ¶ 61,028 (2005).

acted as lead agency under NEPA.[8] Consistent with its responsibilities under NEPA and the NGA, FERC prepares a detailed technical study of the design of the pipeline, its construction techniques, the direct, indirect, and cumulative environmental impacts of construction and operation, and the public need for the pipeline. It considers the interests of the affected states, and the interests of individuals, businesses, and groups that participate in FERC's environmental review process. The 2005 amendments to the NGA reaffirmed FERC's paramount authority over natural gas transportation.[9]

B. States Have A Limited Role In The Interstate Natural Gas Pipeline Approval Process

The CWA gives states a significant – but confined – role in evaluating the environmental impacts of in-

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[8] *See* Interagency Agreement on Early Coordination of Required Environmental and Historic Preservation Reviews Conducted in Conjunction with the Issuance of Authorizations to Construct and Operate Interstate Natural Gas Pipelines Certificated by the Federal Energy Regulatory Commission at 5 (2002), *available at* http://www.ferc.gov/legal/maj-ord-reg/mou/mou-20.pdf; *see also* 40 C.F.R. § 1501.5 (493a-495a), 43 Fed. Reg. 55992 (Nov. 29, 1978) (Council on Environmental Quality regulations calling since 1978 for a lead agency to coordinate participation of other Federal, state, and local agencies preparing an EIS).

[9] *See* 15 U.S.C. § 717n(b)(1) (457a) (confirming FERC's traditional role as lead agency under NEPA); 15 U.S.C. § 717n(d) (458a) (requiring FERC to develop a single consolidated record for judicial review of all decisions made or actions taken by FERC, another Federal agency, or a state agency acting under delegated Federal authority with respect to any Federal authorization); *see also Natural Gas Symposium* at 44 (statement of Sen. Larry Craig discussing "duplicative process, waste of resource[s], and the right hand questioning the left hand's actions" involved in the then-existing FERC process).

terstate pipeline construction and operation on state waters. Under § 401(a)(1), any applicant for a FERC certificate to construct a pipeline that may result in a discharge into navigable waters of any state must provide FERC with a state certification that "such discharge" will comply with applicable requirements of the CWA and the state's WQS and antidegradation policy. *See* 33 U.S.C. § 1341(a)(1) (478a-479a).

C. *Denial II* Was "Inconsistent" With The Governing "Federal Law"

Islander East sought review of *Denial II* arguing that it was "inconsistent with the Federal law governing [the] permit" under NGA § 19(d), 15 U.S.C. § 717r(d) (462a). Islander East explained that *Denial II* must be read not only against the text of the CWA, EPA's regulatory guidelines and CTDEP precedent, but also in light of the regulatory scheme established by the NGA and the determinations made by FERC and the other expert agencies involved in considering authorizations required under Federal law for the pipeline.[10] The Second Circuit largely ignored this argument, focusing instead on the narrow and subsidiary question whether there was any record evidence to support *Denial II*.

The Second Circuit chose to allow *Denial II* to stand based on CTDEP's conclusions that the use of anchors, anchor cables, and engineered backfill would have adverse impacts on "an unacceptably large area" of the seafloor. (21a, 47a, 57a.) It accepted CTDEP's finding that depressions in the seafloor left by anchors and anchor cables during pipeline construction would make it difficult for

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[10] *See* Islander East Brief at 5, 7-13, 41 (Jan. 19, 2007); Islander East Reply Brief at 2-7 (Feb. 20, 2007).

shellfish harvesting equipment to operate in a 1,120-acre corridor, resulting in the loss of that area to shellfishing.[11] (27a.) Neither CTDEP nor the court found that these impacts were the result of a discharge that had a significant adverse effect on *water* or *water quality*, the only findings a state agency has jurisdiction to make under § 401(a) in this context. As Islander East demonstrates in Part I.D below, only a denial based on those findings would be consistent with the Federal law governing the issuance of a § 401(a) permit for an interstate pipeline.

D. *Denial II* Is Contrary To The Text And Purpose Of The CWA And EPA Guidelines And The Comprehensive Regulatory Scheme Established By The NGA

Nothing in the text of § 401(a)(1) or EPA regulations and guidelines permits a state agency to stop the construction of an interstate natural gas pipeline in its tracks for a reason having nothing to do with water or water quality. A state agency does not have the power to regulate impacts to the seafloor resulting from use of anchors and anchor cables, or engineered backfill, unless they adversely affect the water or water quality in a significant way. Allowing a state agency to block interstate pipeline construction on any basis other than its impact on water or water quality under § 401(a) is contrary to § 303 of the CWA, 33 U.S.C. § 1313 (466a-478a), which requires

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[11] Of the 1,120-acre "corridor," only 3.2 acres would be impacted by anchor strikes. Only a portion of the remaining 1,116.8 acres would be affected by anchor cables as they brush across the top few centimeters of the seafloor, and that area would recover quickly. (*See* 115a-116a; 14a, 30a-31a.)

states to maintain WQS that set *water quality* goals and regulate *water quality*. *See PUD No. 1*, 511 U.S. at 704. It is likewise contrary to the statutory mandate that a state agency must consider the use of navigable waters for "*industrial*, and other purposes," and "their use and value for navigation."[12] *See* 33 U.S.C. § 1313(c)(2)(A) (470a) (emphasis added).

In addition, while Connecticut's antidegradation policy is designed to protect existing and designated "uses" of state waters, the "use" provisions must be read in the context of their place in the antidegradation policy as a whole. *See Nat'l Ass'n of Home Builders*, 127 S. Ct. at 2534. That policy focuses only on water quality and the impacts of discharges. For example, it specifically permits dredging activities if the *discharges* from dredging will not result in a significant change in *water quality*. (500a-501a.) Thus, even where dredging, an activity that does disturb the seafloor, is involved, the focus is on sedimentation from dredging, not the seafloor itself.

CTDEP's attempt to expand its § 401(a)(1) powers is also inconsistent with EPA regulations and guidelines.[13] EPA has never sanctioned the interpretation

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[12] It is also contrary to the express statutory limitation that the CWA is not to be construed to limit the authority of a Federal agency, like FERC, under any law not inconsistent with the CWA. 33 U.S.C. § 1371(a)(1) (484a).

[13] EPA regulations and guidelines confirm that the purpose of § 401(a)(1) is to protect water and water quality. *See, e.g.*, 40 C.F.R. § 131.10(d) (490a) (uses are to be deemed attainable if they can be achieved by imposition of effluent limitations); 40 C.F.R. § 131.12(a) (492a) (state antidegradation policies must ensure the "level of water quality necessary to protect the existing uses"; "[w]here the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be

of Connecticut's antidegradation policy that CTDEP relied on in this case. To the contrary, EPA has made it clear that an overly restrictive interpretation of an antidegradation policy does not comport with the CWA. For example, an antidegradation policy cannot be applied literally to dredge and fill activities authorized under § 404 of the CWA, 33 U.S.C. § 1344, because that section permits those activities to be conducted.[14] Likewise, it would be inconsistent with the purposes of the CWA and the NGA for a state to interpret or implement its WQS and antidegradation policy so narrowly as to preclude pipeline construction for reasons that have nothing to do with the impacts of the project on water or water quality. Nothing in Connecticut's WQS or antidegradation policy gives CTDEP the power to regulate anchor and cable impacts on the seafloor per se.

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maintained and protected"). Connecticut's WQS and antidegradation policy (496a-503a) are consistent on their face with EPA's regulations. Nothing in them suggests that they are designed to permit CTDEP to regulate impacts to the seafloor that have no effect on water or water quality. *See, e.g.*, Connecticut WQS Nos. 1, 2, and 5 (496a).

[14] EPA, *Water Quality Standards Handbook*, App. G, Questions and Answers on Antidegradation at 5 (Aug. 1985). Such a literal interpretation of the antidegradation policy could result in preventing the issuance of *any* wetland fill permits under § 404, even though "it is logical to assume that Congress intended some such permits to be granted within the framework of the Act." *Id.* EPA accordingly "interprets § 131.12(a)(1) of the anti-degradation policy to be satisfied with regard to fills in wetlands if the discharge did not result in 'significant degradation' to the aquatic ecosystem as defined under section 230.10(c) of the Section 404(b)(1) guidelines." *Id.* Similarly, the legislative history of the 2005 amendments to the NGA makes clear that Congress expected it would be necessary to construct interstate pipelines in water bodies like Long Island Sound.

The Second Circuit also failed to consider whether *Denial II* was "inconsistent" with the comprehensive regulatory scheme established by the NGA because it usurped FERC's authority over matters Congress entrusted to FERC alone. The court attached no significance to the fact that the anchor and cable depressions in the seafloor to which CTDEP objected would be the direct result of construction methods that FERC specifically approved for this part of the pipeline route. Nor did the Second Circuit take into account the fact that the FERC Orders and the FEIS specifically addressed the possible environmental impacts of pipeline construction on shellfish habitat and shellfishing and concluded that most damage would be limited and could be adequately mitigated. *See infra* p. 24.

The Second Circuit should have defined the scope and content of the phrase "inconsistent with the Federal law governing [the] permit" in the context of all of the applicable laws and regulations. Had it done so, it would have concluded that "Federal law" includes not only the CWA and Federal and state regulations and decisions issued under the CWA, but also the comprehensive scheme of pipeline regulation established under the NGA, FERC's paramount power over pipeline route and construction methods, and the FERC record, the FEIS, and FERC Orders.

Such an interpretation would be consistent with the "fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme." *Nat'l Ass'n of Home Builders*, 127 S. Ct. at 2534 (citations and internal quotation marks omitted). It would harmonize the NGA, as amended in 2005, the CWA, and NEPA by giving ef-

fect to the express language and purpose of all three of these interrelated statutes. It would permit FERC to exercise exclusive control over a pipeline's route and construction methods, and to make the complex technical, engineering, environmental, and public need judgments that lie at the heart of the NGA certificate process.

This interpretation would not disenfranchise state agencies under the CWA. Instead, it would preserve the traditional role the CWA gives them to regulate discharges into water, water quality, and other changes to water in a manner that would permit them to protect existing and designated uses, while preventing them from straying outside the province afforded them and into the exclusive province of FERC to regulate such matters as pipeline route and construction techniques.

This balancing of roles would be consistent with this Court's decisions in *California v. FERC*, 495 U.S. 490 (1990), and *First Iowa Hydro-Electric Cooperative v. FPC*, 328 U.S. 152 (1946). In both cases, this Court declined to interpret the FPA in a fashion that would allow states to impose requirements that interfered with FERC's comprehensive planning authority under the FPA. *Id.* This Court explained specifically in *First Iowa* that Congress had intended a "dual system involving the close integration of these powers rather than a dual system of futile duplication of two authorities over the same subject matter." 328 U.S. at 171. *California v. FERC* followed *First Iowa* in holding that, while the FPA protects certain state laws from preemption, it would be contrary to Congress' intent to allow a state to impose requirements that would "'constitute a veto of the project that was approved and licensed by FERC.'" 495 U.S. at 506-07

(citation omitted). Allowing states to go beyond their § 401(a) powers to block interstate, FERC-certificated pipelines would have the identical result.

II. THIS COURT SHOULD GRANT CERTIORARI TO ESTABLISH THAT STATE AGENCIES MUST DEFER TO FERC'S FINAL ORDERS IN STATE § 401(a) PROCEEDINGS INVOLVING INTERSTATE NATURAL GAS PIPELINES

CTDEP and the Connecticut Attorney General both participated in the proceedings that culminated in the FERC Orders certificating Islander East.[15] CTDEP nonetheless gave FERC's Orders and the FEIS no deference in the agency's § 401(a) proceedings, dismissing the latter as merely "valuable resource discussions." (69a-70a.)

As discussed in Part I above, the Federal regulatory scheme has never envisioned a fractured and duplicative approach to environmental decision making. As the regulator empowered to certificate pipelines under the NGA, FERC has long performed the lead agency role under NEPA for purposes of evaluating the environmental impacts of interstate pipeline construction. Allowing state agencies to determine these issues *de novo* – as CTDEP did here – would be inconsistent with both NEPA and the NGA, and inimi-

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[15] CTDEP filed comments on the draft EIS, and both CTDEP and the Connecticut Attorney General sought rehearing. While FERC denied CTDEP's out-of-time motion to intervene, it nonetheless considered CTDEP's comments and arguments as well as the Connecticut Attorney General's in its Orders. As noted at page 8 *supra*, both CTDEP and the Connecticut Attorney General filed petitions for review in the D.C. Circuit, which ultimately dismissed both petitions.

cal to Congress' carefully crafted statutory scheme. It also would put each new natural gas project at risk of being blocked by parochial agencies beholden only to local constituents.

Just as FERC cannot make a determination reserved to the state – whether a pipeline project would have a significant adverse impact on the state's navigable waters or on its water quality – a state agency cannot usurp a role Congress has entrusted to FERC by ignoring determinations reserved to FERC and deciding them all over again for itself, particularly when the state agency participated in the FERC determination processes.

But that is exactly what happened here. FERC Staff examined anchor and cable impacts on shellfishing in the FEIS.[16] (FEIS at 3-65 to 3-66, 3-71 to 3-72.) FERC determined that (1) mitigation measures in the FEIS "would effectively reduce and minimize impacts on commercial fishing activities to an acceptable level" (409a-410a; *see also* 435a-438a); and (2) the FEIS "acknowledges these long-term impacts [of anchor and seabed depressions] and took them into consideration when it determined that the overall project will have limited adverse environmental impacts" (334a-336a). *See also* FEIS at 5-1. CTDEP failed to defer to FERC's considered expert judgment on these environmental impacts and the ability to mitigate this construction method, thus invading

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[16] As discussed at page 11 *supra*, CTDEP was also concerned about a 5.5-acre area that would be affected by engineered backfill. However, its concerns did not center on impacts to water or water quality. Moreover, it is unlikely that the Second Circuit would have found impacts to this almost immeasurably small portion of the Sound, standing alone, a rational basis for permit denial.

FERC's exclusive jurisdiction and effectively reversing its conclusions.

Deference is particularly warranted in this case because these determinations were final. Section 19(b) of the NGA grants "exclusive" jurisdiction to review FERC orders to the courts of appeals whose orders "shall be final." 15 U.S.C. § 717r(b) (460a-461a). FERC's Islander East certificate Orders became "final" under § 19(b) when no party pursued review of them in the court of appeals. *See Williams Natural Gas Co. v. City of Oklahoma City*, 890 F.2d 255, 262 n.8 (10th Cir. 1989).

The finality of these FERC Orders necessarily precludes CTDEP from litigating *de novo* all issues inhering in the FERC proceeding. *City of Tacoma v. Taxpayers of Tacoma*, 357 U.S. 320, 336 (1958) (construing the parallel and substantially identical § 313(b) of the FPA). Any other result would be incongruous, allowing a state agency to contest the issuance of a certificate before FERC, lose, seek rehearing, lose, file a petition for review, voluntarily dismiss its petition, revisit the issue in a state proceeding, examine the same evidence, reach an opposite conclusion, and block a project.

Thus, CTDEP does not have the power to reverse *de facto* FERC's conclusions regarding the impact of anchor drops and cable sweeps on the seafloor that "inhered" in FERC's certification, as it did in its § 401(a) denial that vetoed the Federally authorized project. Allowing state agencies to redetermine issues within FERC's exclusive jurisdiction and finally decided by FERC would be contrary to the will of Congress because it would not "help get [natural gas

pipeline] projects . . . constructed,"[17] but instead would prevent them from being built at all.

CONCLUSION

The petition for writ of certiorari should be granted.

Respectfully submitted,

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September 18, 2008

[17] Statement of Rep. Barton. *See supra* note 2.

APPENDIX

APPENDIX A

UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

Docket No. 06-5764-ag

ISLANDER EAST PIPELINE COMPANY, LLC,
Petitioner,

v.

GINA MCCARTHY, COMMISSIONER OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,

and

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,
Respondents.

August Term, 2006
Argued: April 10, 2007
Decided: May 2, 2008

Before:

KEARSE and RAGGI, *Circuit Judges*, and RESTANI, *Judge*.[1]

Islander East Pipeline Company, LLC, whose ability to secure federal approval to build a natural gas pipeline across Long Island Sound depends, in part,

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[1] The Honorable Jane A. Restani, Chief Judge of the United States Court of International Trade, sitting by designation.

on the procurement of a water quality certification from the State of Connecticut Department of Environmental Protection, petitions this court for review of what Islander East contends is an arbitrary and capricious second denial of certification.

The petition for review is denied.

FREDERICK M. LOWTHER (Beth L. Webb, Janet M. Robins, *on the brief*), Dickstein Shapiro LLP, Washington, D.C.; Anthony M. Fitzgerald, Carmody & Torrance, LLP, New Haven, Connecticut; Thomas L. Stanton, Associate General Counsel, Spectra Energy Islander East Pipeline Company, LLC, as Operator for Islander East Pipeline Company, LLC, Waltham, Massachusetts, *for Petitioner*.

KIMBERLY P. MASSICOTTE, Assistant Attorney General (Richard M. Blumenthal, Attorney General for the State of Connecticut; John M. Looney, David H. Wrinn, Scott N. Koschwitz, George W. O'Connell, Assistant Attorneys General, *on the brief*), Office of the Attorney General, Hartford, Connecticut, *for Respondents*.

REENA RAGGI, *Circuit Judge*:

This case arises from the ongoing efforts of Islander East Pipeline Co., LLC ("Islander East") to secure a water quality certification from the Connecticut Department of Environmental Protection ("CTDEP") for a plan to build a natural gas pipeline from Connecticut to New York across Long Island Sound. Such certification is a necessary prerequisite to Islander East securing final federal approval for its pipeline project

under the Natural Gas Act of 1938 ("NGA"), Pub. L. No. 75-688, 52 Stat. 831 (codified as amended at 15 U.S.C. §§ 717-717w). Pursuant to NGA § 19(d), 15 U.S.C. § 717r(d), Islander East petitions this court for review of the CTDEP's December 19, 2006 denial of certification, which Islander East challenges as arbitrary and capricious, *see* CTDEP, Water Quality Certification Application No. 200300937-SJ, Islander East Pipeline Co., LLC (Dec. 19, 2006) ("2006 Denial"). The argument is familiar to us. In a published opinion filed October 5, 2006, a majority of this panel vacated the CTDEP's initial February 5, 2004 denial of certification to Islander East as arbitrary and capricious and remanded for further agency review of the pipeline application. *See Islander East Pipeline Co. v. Conn. Dep't of Envtl. Prot.* ("*Islander East I*"), 482 F.3d 79 (2d Cir. 2006).

The CTDEP has now completed that review and persists in denying certification. Whatever reservations might legitimately be voiced as to this latest decision, *see infra* at [ ] (Restani, J., dissenting in part), judicial review of the CTDEP's denial is limited to the grounds set forth in the Administrative Procedure Act ("APA"), specifically 5 U.S.C. § 706(2)(A), which provides that we are to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." Because the CTDEP supports its second denial with reasoned explanations tied to record evidence, this court can no longer dismiss its conclusions as unlawful under the APA. Accordingly, we deny Islander East's petition for review.

I. *Background*

A. *The Regulatory Scheme*

Although we assume readers' familiarity with our prior opinion in *Islander East I*, 482 F.3d 79, our discussion of the relevant facts as well as our assessment of the merits of Islander East's petition are facilitated by a preliminary review of the relevant regulatory scheme.

1. *The Natural Gas Act*

The Natural Gas Act of 1938 comprehensively regulates the transportation and sale of natural gas in interstate commerce. *See id.* at 84. Pursuant to NGA § 7, any party seeking to construct, extend, acquire, or operate a facility for the transportation or sale of natural gas in interstate commerce must secure "a certificate of public convenience and necessity" from the Federal Energy Regulatory Commission ("FERC"). *See* 15 U.S.C. § 717f(c)(1)(A).[2] Further, the FERC must ensure that the proposed project complies with all requirements of federal law, including, but not limited

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[2] By order dated September 19, 2002, the FERC concluded that Islander East's proposed pipeline was required by public convenience and necessity because it would provide the significant public benefit of a second source of natural gas for Long Island in an environmentally acceptable manner. *See Islander East I*, 482 F.3d at 86. In a Final Environmental Impact Statement ("FEIS") prepared preliminary to this order, the FERC had identified a preferable alternative pipeline route that "had a shorter Long Island Sound crossing, avoided more shellfish leases, and would only have air quality and noise impacts onshore in Connecticut." *Id.* (citing FERC, Islander East Pipeline Project, FEIS (2002)). Nevertheless, the FEIS concluded that, if Islander East employed certain measures to mitigate environmental impacts along its proposed route, its plans for the pipeline would also be environmentally acceptable. *See id.*

to, those established by the Clean Water Act, 33 U.S.C. §§ 1251-1387, and the Coastal Zone Management Act, 16 U.S.C. §§ 1451-65. *See Islander East I*, 482 F.3d at 84 (citing *Islander East Pipeline Co.*, 102 F.E.R.C. ¶61,054, p. 61,130 (2003)).

While the NGA generally preempts local permit and licensing requirements, *see id.* (citing *Islander East Pipeline Co.*, 102 F.E.R.C. ¶61,054, p. 61,130); *National Fuel Gas Supply Corp. v. Pub. Serv. Comm'n*, 894 F.2d 571, 576-79 (2d Cir. 1990), the Clean Water and Coastal Zone Management Acts are notable in effecting a federal-state partnership to ensure water quality and coastal management around the country, so that state standards approved by the federal government become the federal standard for that state. *See Islander East I*, 482 F.3d at 90 n.9 (explaining that, under Clean Water Act, state water quality standard approved by federal Environmental Protection Agency ("EPA") "becomes 'the water quality standard for the applicable waters of that State'" (quoting 33 U.S.C. § 1313(c)(3))). Consistent with this scheme, the two Acts require applicants for federal permits to provide federal licensing agencies such as the FERC with certifications from affected states confirming compliance with local standards. *See id.* at 84 & nn. 3-4 (citing 16 U.S.C. § 1456(c)(3)(A); 33 U.S.C. § 1341(a)(1)).

Islander East's dispute with the CTDEP regarding its compliance with the state's coastal zone management plan is the subject of a different appeal pending in this court, *see State of Connecticut v. United States Dep't of Commerce*, Nos. 07-4522-cv(L), 07-4593-cv(CON).[3] Accordingly, on this petition, we consider

[3] On January 23, 2008, a different panel of this court dismissed the appeal for lack of subject matter jurisdiction. Appellants filed a petition for rehearing on April 9, 2008.

only Islander East's challenge to the CTDEP's denial of the water quality certification that, being mandated by the Clean Water Act, is a necessary prerequisite to the FERC granting final approval to commence construction of the proposed pipeline.

2. *The Clean Water Act*

The Clean Water Act specifically protects "existing" and "designated" uses of navigable waters. *PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. 700, 704-05 (1994) (citing 33 U.S.C. § 1313(c)(2)(A) & (d)(4)(B); 40 C.F.R. § 131.12). Thus, a state's water quality standards must identify existing and designated uses, such as drinking, recreation, wildlife support, and shellfish cultivation, and must establish "'water quality criteria for such waters based upon such uses.'" *Id.* at 704 (quoting 33 U.S.C. §313(c)(2)(A)). Further, pursuant to the Clean Water Act's "antidegradation policy," a state's water quality standards must "be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." *Id.* at 705 (citing 33 U.S.C. § 1313(d)(4)(B)). The mandate's broad reach is reflected in 40 C.F.R. § 131.12(a)(2), which provides that states "shall assure water quality adequate to protect existing uses fully." Thus, no activity that would "'partially or completely eliminate any existing use'" is permitted, even if it would leave the majority of a given body of water undisturbed. *PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. at 718-19 (quoting EPA, Questions and Answers on Antidegradation at 3 (Aug. 1985)).[4]

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[4] Because the CTDEP does not contend that *any* adverse impact on water quality, however trivial or temporary, would constitute the elimination of an existing use, we need not

To protect against water quality degradation, states may employ both quantitative and open-ended standards. *See id.* at 715-17; *see also* 40 C.F.R. § 131.11 (providing for states to establish numerical and narrative criteria). Open-ended standards serve to ensure against under-inclusiveness in circumstances where it may be impossible to formulate a generalized quantitative standard applicable to all cases. *See PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. at 716-18. In applying open-ended standards, however, a state is expected to translate its narrative criteria into "specific limitations for individual projects." *Id.* at 716.

3. *Connecticut's Water Quality Standards Pursuant to the Clean Water Act*

Two narrative water quality standards figure prominently in this case. Connecticut Surface Water Quality Standard No. 1, as amended, states:

> It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved.

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consider that possibility on this petition. We note, however, that the EPA, in revising its anti-degradation policy in 1983, deleted a provision that disallowed any "further water quality degradation which would interfere with or become injurious to existing instream uses." *Water Quality Standards Regulation*, 48 Fed. Reg. 51,400, 51,402 (Nov. 8, 1983). The EPA made this change "because the terms 'interfere' and 'injurious' were subject to misinterpretation as precluding any activity which might even momentarily add pollutants to the water." *Id.* at 51,402-03.

Connecticut Dep't of Envtl. Prot., Water Quality Stds. at 1 (effective Dec. 17, 2002), http://www.ct.gov/dep/lib/dep/water/water_quality_standards1/wqs.pdf.

Connecticut Surface Water Quality Standard No. 2 states:

> Existing and designated uses such as propagation of fish, shellfish, and wildlife, recreation, public water supply, agriculture, industrial use and navigation, and the water necessary for their protection [are] to be maintained and protected.

Id.

Pursuant to these standards, the CTDEP "Commissioner shall not issue any certificate or permit for any regulated discharge, dredging activity or discharge of fill and dredged materials unless the Commissioner finds that all existing and designated uses as defined in these water quality standards will be protected fully." *Id.*, App. E-1; *see also id.* at 1 (Surface Water Quality Std. No. 2).

The coastal waters at issue in this petition are denominated by Connecticut as either "SA" or "SB/SA." SA waters are designated for "habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation." *Id.* at 15 (Coastal Waters Classifications and Criteria). SB waters are designated for "habitat for marine fish, other aquatic life and wildlife; commercial shellfish harvesting; recreation; industrial water supply; and navigation." *Id.* While waters in the intermediate SB/SA classification may not currently support one or more of the uses designated for SA waters, *e.g.*, "shellfish harvesting for direct human consumption," the state's goal for such waters is the "achievement of Class SA Criteria

and attainment of Class SA designated uses." *Id.* Indeed, SA classification is a default classification for marine waters in Connecticut. *See id.* at 7. Thus, to the extent the impact of the proposed pipeline on shellfish harvesting is at issue on this petition, we note that all marine waters in Connecticut appear to be designated for shellfish harvesting unless the state has specifically established a lesser water quality classification in a given area. *See id.* at 7, 15.[5]

B. *The Proposed Pipeline*

1. *The Pipeline Route from Connecticut to New York*

On June 15, 2001, Islander East filed an application under NGA § 7(c) with the FERC for a certificate of public convenience and necessity to construct, own, and operate a natural gas pipeline between Connecticut and New York. *See Islander East Pipeline Co.*, 97 F.E.R.C. ¶61,363, p. 62,685 (2001). Islander East proposed to construct 44.8 miles of 24-inch-wide pipeline from an interconnection with an existing pipeline near North Haven, Connecticut, to Brookhaven, New York. A further 5.6 miles of pipeline would be constructed from Islander East's anticipated mainline near Wading River, New York, to a power plant in Calverton, New York. *Id.* The petition before this court focuses on the 22.6-mile section of pipeline that would cross Long Island Sound. *See Islander East Pipeline Co.*, 100 F.E.R.C. ¶61,276, p. 62,102 (2002).

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[5] This goal is consistent with Connecticut's significant role in the nation's production of hard clams and oysters for human consumption. *See* 2006 Denial at 23-24 (reporting that, in 2001, state ranked first in production of hard clams and second in its production of oysters among East Coast states).

2. *The Construction Techniques Relevant to the Challenged Denial*

Islander East proposed to employ three construction techniques in building the offshore section of the pipeline—horizontal directional drilling, dredging, and plowing—which the CTDEP concludes would adversely affect the existing and designated uses of the state's coastal waters, particularly as they pertain to shellfish harvesting. We briefly describe these techniques and some of the concerns identified with respect to each.

a. *Horizontal Directional Drilling*

To install a pipeline running from a natural gas connection site on land in Connecticut into Long Island Sound, Islander East proposed to employ a horizontal directional drill to create a 4,200-foot tunnel underneath nearshore waters off Branford, Connecticut. *See* Islander East Pipeline Project, Permit Application for: 401 Water Quality Certificate ("Permit Application"), App. A, Maritime Pipeline Installation Methodology at 1 (Mar. 14, 2003) ("Installation Methodology"); *see also* 2006 Denial at 30 & App. B. The tunnel would start some 700 feet inland, where the drill would burrow to a depth of 110 feet below sea level. *See* Permit Application, Attachment C. The drill would then level off and proceed south for about 2,000 feet, after which it would drill diagonally upwards until it emerged from the Sound's seabed around milepost 10.9. *See id.*

Once the horizontal directional drill bored a small-diameter "pilot hole" the length of the tunnel, Islander East proposed to enlarge that hole by a process called "reaming." *See* Permit Application, Installation Methodology at 9-10. To effect this enlargement, a "drill string" would first be driven through the pilot hole to

the offshore exit point. There, workers on board a barge would attach a reaming tool to the string, which would, in turn, be pulled back through the tunnel toward the drilling rig on shore. On its way, the reaming tool would cut rock and soil until the tunnel was enlarged to a diameter of 36 inches. *See id.* at 10. At that point, a mile-long segment of pipe would be pulled into place near the exit hole, then pulled back through the tunnel toward the drilling rig, thereby installing that underground segment of pipeline. *See id.* at 1, 10.

"Drilling fluid," a substance composed of 97 percent fresh water and 3 percent bentonite clay, would be continuously pumped into the borehole throughout the drilling process. *See* Conn. Siting Council, Finding of Facts, Dkt. No. 221 at 19 (Aug. 1, 2002); Permit Application, Installation Methodology at 7. This fluid would travel from equipment on the surface, through the inside of the drill pipe, out the end of the pipe, and back to the surface along the space between the drill pipe and the interior wall of the tunnel. The circulation of drilling fluid would both supply hydraulic power to the drill bit and transport soil and rock cuttings from the drill bit to the surface. *See* Permit Application, Installation Methodology at 7, 9. Islander East proposed to recapture, filter, and recycle most, but not all, of the drilling fluid. *See id.* at 7. Based on Islander East's estimates, the FERC concluded that, when the drill exited the seabed at milepost 10.9, approximately 455 barrels of drilling fluid would necessarily be released from the borehole onto the sea floor, covering an area approximately 444 feet in diameter to a depth of 5 millimeters. *See* FEIS 3-53. In addition to this planned release, the CTDEP identified a risk that drilling fluid could escape into Sound waters through geologic fissures in the bedrock, an

unplanned release called a "frac-out." *See* 2006 Denial at 60 (citing FEIS 3-54).

b. *Dredging and Backfilling*

To install the next section of pipeline from milepost 10.9 to milepost 12, an area of shallow waters between 13 and 20 feet deep, Islander East proposed to dredge a v-shaped trench 5 feet into the seabed. *See* 2006 Denial at 32-33. To accommodate the pipeline's transition from tunnel to trench, Islander East would also dredge an acre-sized exit pit at milepost 10.9 approximately 18 feet deep, 130 feet wide, and 301 feet long. *See* FEIS 3-53; 2006 Denial at 32. To create this exit pit and trench, Islander East would remove approximately 24,000 cubic yards of sediment from approximately 5.5 acres of seabed. *See* Islander East Pipeline Project, Offshore Dredge Disposal Permit Amendment at 2 (July 29, 2003). Although Islander East originally proposed that, after installation of the pipeline into the trench, it would backfill the dredged areas with the removed sediment, in response to sedimentation concerns[6] identified by the CTDEP about that process, Islander East modified its proposal to provide for most of the dredged materials, or "spoil," to be placed on barges for open water disposal. *See id.* at 6-10. Islander East would then refill the trench and exit pit with an "engineered backfill" composed of small non-native rocks and sand. This backfill would be deposited into the trench with a "tremie tube," a specialized funnel designed to channel the backfill directly into the trench. *See* 2006 Denial at 36-37

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[6] Sedimentation is the term used to describe the process where loose sediment suspended in the water column settles onto the sea floor. *See infra* at **[30-35]** (discussing CTDEP's sedimentation concerns in this case).

(citing Haley & Aldrich, Inc., Report on Engineered Backfill Study (May 21, 2003)).

c. *Plowing*

To complete pipeline installation in waters beyond milepost 12, Islander East proposed to continue excavation of the 5-foot-deep trench using a subsea plow, supplemented with hand-excavation by divers in certain areas. *See id.* at 35; Permit Application, Installation Methodology at 1. Plowing would require a barge to pass over the pipeline route three times: (1) to lay the pipe, (2) to pull a "post-lay plow," and (3) to pull a "backfill plow." *See* Permit Application, Installation Methodology at 1, 5-6. At the first step, crew on the barge would weld pipe pieces together to set onto the sea floor. As each length of pipe was so laid, the barge would move ahead approximately forty feet where the welding and laying process would begin anew. *See id.* at 2-3. At the second step, a barge would make another pass over each area, this time to lower a post-lay plow over the pipeline that had been laid on the sea floor. This plow would hydraulically close to encapsulate the pipe, at which point the barge would move forward, excavating a trench into which the pipe could be released when the plow was reopened. *See id.* at 5. At the third step, a barge equipped with a backfill plow would fill in the trench with dredged materials. *See id.* at 6.

In each of these three passes, a barge would likely use an anchor-mooring system to move the vessel along the pipeline path, pulling in bow anchor lines and releasing stern anchor lines. *See id.* at 2, 5. Anchor-handling tugboats would move the bow anchors forward and pick up the stern anchors. *See id.* at 5. Each time anchors were thus set, they would necessarily strike the sea floor, dispersing sediment and leaving a de-

pression several feet deep over areas of roughly 200 square feet per strike. *See* 2006 Denial at 41 (citing TRC Envtl. Corp., Impacts Analysis Report at 30 (Feb. 12, 2002)); *see also* TRC Envtl. Corp., Impacts Analysis Report § 3.1.3 (May 2003) (updated version of 2002 Report) (estimating that "[t]he total area impacted by the anchor drops from the plowing operations would be about 7.3 acres"). Meanwhile, the cables attaching the anchors to a barge would drag across the sea floor as the barge moved, resulting in "cable sweep," causing shallow depressions in the seabed and further dispersing sediment. 2006 Denial at 40-43 & n.60 (citing, *inter alia*, TRC Envtl. Corp., Impacts Analysis Report 28, 30 (Feb. 12, 2002)).

C. *Islander East's Efforts to Secure Water Quality Certification*

1. *The CTDEP's 2004 Denial of Certification*

Islander East first applied to the CTDEP for a water quality certification for its pipeline project on February 13, 2002. *See Islander East I*, 482 F.3d at 87. The following year, on March 13, 2003, Islander East withdrew that application and substituted a new one incorporating modified offshore construction techniques aimed at reducing the project's environmental impacts. *See id.* (detailing proposed modifications). The CTDEP nevertheless denied certification on February 5, 2004, concluding that the pipeline project was inconsistent with state water quality standards in at least two respects: (1) the various processes associated with pipeline installation "would cause temporary water quality disturbance, permanent change to the benthic substrate [(the sea floor)], and negative impacts to the aquata biota," inconsistent with the goal of Connecticut Surface Water Quality Standard No. 1 "to restore or maintain the chemical, physical,

and biological integrity of surface waters," *id.* at 95 (internal quotation marks and citations omitted); and (2) backfill discharge would permanently degrade waters in the vicinity of the Thimble Islands, rendering the seabed unsuitable for various shellfish and organisms presently inhabiting the area, which result would be inconsistent with Connecticut Surface Water Quality Standard No. 2 and Connecticut's antidegradation policy, which requires "the maintenance and protection of water quality in high quality waters and protection and maintenance of existing uses in all cases," *id.* at 100 (internal citations omitted). Islander East challenged the CTDEP denial in a state action filed in the Connecticut Superior Court, *see Islander East Pipeline Co., LLC v. Envtl. Prot. Comm'r*, No. HHD-CV-04-4022253-S (Conn. Super. Ct., filed June 21, 2004), which it subsequently withdrew.

2. *This Court's 2006 Decision Vacating the CTDEP's Initial Denial*

Islander East's withdrawal of its state challenge and its initial petition for review by this court were prompted by Congress's enactment of the Energy Policy Act of 2005, Pub. L. No. 109-58 , 119 Stat. 594. Section 313(b) of the Act amended § 19 of the NGA to afford United States Courts of Appeals "original and exclusive jurisdiction over any civil action for the review of an order or action of a Federal agency . . . or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit, license, concurrence, or approval . . . required under Federal law" for the construction of a natural gas facility. 15 U.S.C. § 717r(d)(1); *see also Islander East I*, 482 F.3d at 88 (noting that Islander East's petition for judicial review was filed on same day NGA amendment was signed into law).

Following argument, this court, by majority decision, rejected the CTDEP's constitutional and retroactivity challenges to Islander East's first petition. *See Islander East I*, 482 F.3d at 91, 93. Turning to the merits, the court concluded that the CTDEP's denial of certification was, as a whole, arbitrary and capricious. *See id.* at 104-05. With respect to the CTDEP's conclusion that the project was inconsistent with Surface Water Quality Standard No. 1, the court observed that the CTDEP had failed both to cite record evidence reasonably supporting its finding of permanent harm to natural habitats and benthic substrate, *see id.* at 98-99 (noting that cited sources did not support conclusion that sedimentation in pipeline area would result in permanent loss of shellfish habitat), and to address contrary evidence on the point, *see, e.g., id.* at 97 (noting four reports projecting recovery of shellfish habitat). As for the CTDEP's conclusion that the project was inconsistent with Surface Water Quality Standard No. 2, the court faulted the agency for failing to define the area affected, not acknowledging evidence that engineered backfill could improve shellfish habitat, and relying on negative past experiences with construction projects in the Sound without considering subsequent advances in pipeline construction technology. *See id.* at 100-04.

The court's conclusion that the CTDEP's denial of certification was arbitrary and capricious was reinforced by two further facts: the surprising brevity of the agency's analysis relative to the voluminous and complex record, *see id.* at 105,[7] and documentary

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[7] In *Islander East I*, we contrasted lengthy reports by the FERC, such as its August 2002 FEIS, which spanned hundreds of pages, with the CTDEP report, which contained "a mere two-

evidence suggesting that the agency had predetermined to oppose the pipeline project under any circumstances, *see id.*[8] While the court's independent review of the voluminous administrative record identified some evidence potentially supportive of the CTDEP's conclusion, the majority declined "to mine the record for evidence" not identified by the agency, *id.* at 100, noting principles of administrative review instructing that a federal court "may not supply a rationale for agency action where the agency has provided none" or "construct support for an agency's conclusion when the agency has not pointed to evidence on the record favoring its decision," *id.* at 101 (citing *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.* ("*State Farm*"), 463 U.S. 29, 42-43 (1983)).[9]

Accordingly, being careful to "draw no conclusion" as to whether the record evidence obligated the CTDEP to grant Islander East's certification applica-

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and-a half pages of analysis, supported by five record citations, none of which . . . reasonably support the broad conclusions reached." 482 F.3d at 104.

[8] The court noted that "some evidence indicates the CTDEP's greater concern with mounting a public relations campaign to preclude building the pipeline than with neutrally evaluating the record evidence." *Islander East I*, 482 F.3d at 105.

[9] Judge Kearse, in her dissenting opinion in *Islander East I*, did mine the record for evidence supporting the CTDEP's denial decision. *See* 482 F.3d at 108-16 (stating "We are not to supply the rationale for an agency decision; but where the agency has stated its rationale, or where its rationale may reasonably be discerned, we are required to review the whole record, and to uphold the agency decision if it is supported by substantial evidence on the record considered as a whole." (internal quotation marks and citations omitted)). Not surprisingly, much of that evidence is now relied on by the CTDEP in support of its second denial of certification.

tion, we remanded the case to the agency with instructions that it "conduct the sort of complete and reasoned review required by law." *Id.* at 105.

3. *The CTDEP's 2006 Denial of Certification*

Following remand, the CTDEP reexamined the record and, on December 19, 2006, again denied Islander East's application for a water quality certification. *See* 2006 Denial. We do not here attempt to outline the numerous findings made and conclusions reached in the agency's 82-page decision because we review many of these in the discussion section of this opinion. We note simply that Islander East promptly petitioned for judicial review, arguing that this second denial was also arbitrary and capricious.

II. *Discussion*

A. *Jurisdiction and Standard of Review*

Under the Energy Policy Act of 2005, this court has jurisdiction to remand the CTDEP denial of certification if it is "inconsistent with the Federal law governing such [action] and would prevent the construction, expansion, or operation of the facility subject to [the NGA]." 15 U.S.C. § 717r(d)(3). There is no dispute that the 2006 Denial would prevent the construction of the proposed natural gas pipeline. This leaves only the question whether the denial is inconsistent with federal law. In *Islander East I*, we concluded that this question is subject to two-step consideration. *See* 482 F.3d at 94-95. At step one, we employ *de novo* review to determine whether the CTDEP complied with the requirements of relevant federal law. *See id.* at 94. "If no illegality is uncovered during such a review," we proceed to step two to examine the CTDEP's challenged findings and conclusions "under the more deferential arbitrary-and-capricious standard of review

usually accorded state administrative bodies' assessments of state law principles." *Id.* (internal quotation marks and citation omitted).

As before, we easily conclude that the CTDEP complied with the procedural dictates of the Clean Water Act in applying state water quality standards to Islander East's permit application. *See* 33 U.S.C. §§ 1311(b)(1)(C), 1313, 1341(a)(1). This leaves only the second step of analysis: whether the CTDEP's determination that the project would violate Connecticut's water quality standards is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

Under the arbitrary-and-capricious standard, judicial review of agency action is necessarily narrow. *See State Farm*, 463 U.S. at 43; *Environmental Def. v. EPA*, 369 F.3d 193, 201 (2d Cir. 2004). A reviewing court may not itself weigh the evidence or substitute its judgment for that of the agency. *See State Farm*, 463 U.S. at 43. Rather, in deciding whether agency action is arbitrary and capricious, a court considers whether the agency "relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Id.*[10]

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[10] The Clean Water Act reflects Congress's intent that state environmental agencies consider the factors enumerated in a state's federally-approved water quality standards. *See* 33 U.S.C. § 1313(c)(2)(A) (providing that "[s]uch standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also

This is not to suggest that judicial review of agency action is merely perfunctory. To the contrary, within the prescribed narrow sphere, judicial inquiry must be "'searching and careful.'" *National Audubon Soc'y v. Hoffman*, 132 F.3d 7, 14 (2d Cir. 1997) (quoting *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989)); *see Ward v. Brown*, 22 F.3d 516, 521 (2d Cir. 1994) ("Although narrow, appellate review of an administrative record must nonetheless be careful, thorough and probing."). Notably, a court must be satisfied from the record that "the agency . . . examine[d] the relevant data and articulate[d] a satisfactory explanation for its action." *State Farm*, 463 U.S. at 43. Further, the agency's decision must reveal "a 'rational connection between the facts found and the choice made.'" *Id.* (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)). A court will not lightly reach a conclusion that an agency has not examined all relevant data or satisfactorily demonstrated a rational connection between the facts it has found and its final decision. *See Patterson v. Caterpillar, Inc.*, 70 F.3d 503, 505 (7th Cir. 1995) (observing that court "must be very confident that the decisionmaker overlooked something important or seriously erred in appreciating the significance of the evidence" (internal citation omitted)). While a majority of this panel did reach that conclusion in *Islander East I*, 482 F.3d at 97-100, largely because of the paucity of findings made by the CTDEP, *see United States v. Int'l Bhd. of Teamsters*, 170 F.3d 136, 143 (2d Cir. 1999) (observing that court must "guard against an agency . . . drawing inferences that are arbitrary in relation to the facts found, no matter how substantial

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taking into consideration their use and value for navigation").

may be the support for those facts" (internal quotation marks and citations omitted)), we cannot do so here where the CTDEP's challenged decision is supported by more detailed findings and analysis.

B. *The Challenged Denial of Certification Cannot Be Deemed Arbitrary and Capricious*

In its second denial of Islander East's application for a water quality certification, the CTDEP explained that its primary concern was the siting of the proposed pipeline in a Connecticut coastal area that included "an extensive stretch of shallow water" that served as a natural habitat for a variety of shellfish, including clams and oysters. 2006 Denial at 9. As we earlier noted, *see supra* **[4 n.2]**, the FERC had expressed similar concern in identifying an environmentally preferable alternative route, but thought Islander East would be able to mitigate the adverse impacts of its plan. In evaluating that question, the CTDEP determined that the dredging, plowing, and backfilling methods that Islander East proposed to employ in installing a pipeline in shallow waters would adversely affect shellfish habitat and cause the loss of an existing and designated use, *i.e.*, shellfishing, over an unacceptably large area. *See* 2006 Denial at 80. Because Islander East's proposed means of remediating these consequences were uncertain to be effective, the agency concluded that Islander East had failed to demonstrate that the pipeline project would comply with state water quality standards as necessary to secure certification. *See Islander East I*, 482 F.3d at 104 (noting "Islander East's burden to demonstrate its entitlement to favorable action on its [certification] application"); *see also Town of Newtown v. Keeney*, 234 Conn. 312, 322 n.5 (Conn. 1995) (noting that applicant in Connecti-

cut administrative proceeding bears burdens of production and persuasion).

In petitioning for review of the CTDEP denial, Islander East submits that two findings critical to the challenged conclusion are unsupported by the record: (1) that the pipeline would pass through existing or potential shellfish habitat, and (2) that the pipeline would have an adverse impact on that habitat resulting in the loss of an existing or designated use. Islander East does not—and, indeed, could not—argue that, if these findings are supported by the evidence, the denial of certification should be deemed arbitrary and capricious. As we noted earlier, 40 C.F.R. § 131.12(a)(2) states that, pursuant to the Clean Water Act, a "State shall assure water quality adequate to protect existing uses fully." Consistent with this obligation, Connecticut Surface Water Quality Standard No. 2 provides that "[e]xisting and designated uses such as propagation of fish, shellfish, . . . and the water necessary for their protection is to be maintained and protected." In addressing Islander East's challenge, we reiterate that we do not ourselves weigh the evidence or choose among competing inferences that might be drawn therefrom. We consider only whether there is sufficient evidence in the record to provide rational support for the choice made by the agency in the exercise of its discretion. *See State Farm*, 463 U.S. at 42-43. On this deferential standard of review of the record in this case, we deny Islander East's petition for review.

1. *Shellfish Habitat Along the Proposed Pipeline Route*

In the challenged 2006 Denial, the CTDEP tracked the route of the proposed pipeline from its entry point into Long Island Sound at a recessed section of Con-

necticut shoreline near Branford across an expanse of relatively shallow waters through the Thimble Islands. *See* 2006 Denial at 8. The CTDEP identified seabed conditions in this area as particularly hospitable to shellfish cultivation. *See id.* at 12-13 (describing how seabed was product of glacier advances and retreats that had left "[t]hick deposits of layered silt and clay" on seabed); *id.* at 24, 71 (analogizing such seabed to prized topsoil that shellfishermen could stock with "juvenile seed shellfish" much as farmers planted fields with crop seed). It identified a variety of commercially valuable shellfish found in the area, including eastern oysters, hard and soft clams, blue mussels, and channel whelk. *See id.* at 23. The CTDEP noted that the Connecticut Department of Agriculture had approved for direct human consumption the shellfish procured from the "consistently excellent" nearshore waters in which the pipeline would be installed. *Id.* at 21-25; *see also* CTDEP, Map: CT Waters Less Than 50 ft. Classified as SA or SA/SB, with Dep't of Agric./Bureau of Aquaculture "Approved" Shellfishing Designation (Jan. 2007). The CTDEP further noted that the sea floor beneath these nearshore waters had been divided by state and local authorities into plots or beds, which are actively leased to shellfishermen. *See* 2006 Denial at 26, 55, 59.

In *Islander East I*, we faulted the CTDEP for failing, in its initial denial of certification, "to point to even one specific lease" that would be affected by the proposed pipeline. 482 F.3d at 101. The 2006 Denial remedied this defect by identifying four shellfish beds that lie directly above the proposed path for the tunnel to be created by horizontal drilling. *See* 2006 Denial at 59. Further, the CTDEP showed that dredging and plowing activities would affect five state shellfish bed leases and an unidentified number of leases

within the jurisdiction of the town of Branford. *See id.* at 44-46 (identifying 347.54 acres of affected state leases and 240.38 acres of affected Branford shellfish beds).[11] From the totality of this evidence, the CTDEP could rationally conclude that the proposed pipeline construction activities would adversely affect existing and designated shellfish habitat and uses.

In challenging this conclusion, Islander East submits that the CTDEP has mischaracterized the record to create a false impression that the area in question is "critical" shellfish habitat. Petitioner's Br. at 23-25. Islander East asserts that the area actually supports few or no living shellfish, such that construction of the pipeline cannot rationally be inconsistent with Connecticut's water quality standards. To support this argument, Islander East points to a study in which divers found no oysters or hard clams at sites along the pipeline route, *see* Peter E. Pellegrino, Bottom Characterization Surveys of Selected Subtidal and Nearshore Environments off Juniper Point (Branford, CT) at 8, 11 (Jan. 2002), and to testimony from Dr. Roman Zajac that, while the pipeline corridor could support shellfish, no oysters or hard clam populations were actually found there, *see* Conn. Siting Council Hearing Tr. at 54-55, Apr. 12, 2002.

Certainly, this evidence raises legitimate questions about the impact of the proposed pipeline on existing and designated shellfish use. Significantly, the CTDEP

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[11] While Branford did not designate these shellfish beds until 2005, *i.e.*, after Islander East had filed its permit application, they may appropriately be considered in our determination of whether the CTDEP's conclusions are so lacking in evidentiary support as to be arbitrary and capricious. *See generally* 5 U.S.C. § 706 (instructing courts to "review the whole record" in determining whether agency action is arbitrary and capricious).

did not ignore this evidence. *Cf. Islander East I*, 482 F.3d at 98 (faulting agency for failing to address studies contradicting its conclusions). Rather, it appears to have accorded it little weight in light of the cyclical nature of commercial shellfishing, which could account for the reported failures to find shellfish at certain sites on discrete occasions. *See* 2006 Denial at 24-27. As the CTDEP explained, oysters and clams often spend the early part of their lives in hatcheries, only later being moved by fishermen to seabeds to mature. *See id.* at 24-25. Further, because clams burrow, shellfishermen must use dredges to harvest mature specimens, *see id.* at 25-26, and the CTDEP cited surveys noting "extensive trawl marks" likely attributable to shellfish harvesting just past milepost 12, *id.* at 26-27. These facts, together with the evidence of active shellfish leases to commercial fishermen, provided sufficient record support for the CTDEP to conclude that waters in the pipeline corridor are an existing and designated habitat for shellfish and that shellfishing is an existing and designated use of these waters. Thus, we cannot conclude that this finding was arbitrary and capricious. *See Universal Camera Corp. v. NLRB*, 340 U.S. 474, 488 (1951) (holding that reviewing court may not displace agency's choice between "two fairly conflicting views" of evidence).

2. *Elimination of an Existing or Designated Use as a Consequence of the Pipeline Construction*

In considering Islander East's challenge to the second CTDEP finding—that installation of the pipeline would result in the loss of commercial shellfish harvesting in the waters in the nearshore pipeline corridor —we note at the outset that, in making this deter-

mination, the CTDEP discussed in considerably more detail than we include in this opinion a voluminous record of evidence relevant to (1) the geological development of the seabeds in question as valuable shellfish habitat, *see* 2006 Denial at 12-14; (2) the influence of tidal currents and marine conditions on this habitat, *see id.* at 14-16; (3) the sensitivity of the habitat to disturbances in the benthic substrate, *see id.* at 16-19; and (4) the traditional means of shellfish cultivation and harvesting in Connecticut's nearshore waters, *see id.* at 23-27. The CTDEP further reviewed evidence of (5) the methods Islander East proposed to use in installing the pipeline at issue, *see id.* at 27-39; and (6) the likely effects of such methods both generally on water quality and benthic substrate and specifically on the established use of shellfishing, *see id.* at 39-72. Thus, in contrast to *Islander East I*, the agency's second consideration of Islander East's application was more careful and thorough. This is not to say that the extensive evidence before the CTDEP pointed ineluctably in a single direction. To the contrary, the agency was frequently presented with conflicting quantitative findings and expert opinions. It was, however, the responsibility of the CTDEP, and not this court, to resolve record contradictions and to determine which evidence was most persuasive and what weight it deserved. *See Universal Camera Corp. v. NLRB*, 340 U.S. at 488. Mindful that it was Islander East's burden to demonstrate to the CTDEP that its pipeline project complied with state water quality standards, *see Town of Newtown v. Keeney*, 234 Conn. at 322 n.5, we consider only whether the agency findings are sufficiently grounded in record evidence rationally to support the challenged conclusion that the proposed pipeline would result in a loss of existing and

designated shellfishing use, *see State Farm*, 463 U.S. at 43.

a. *The Effects of Anchor Strikes and Cable Sweeps*

(1) *The CTDEP's Findings*

The CTDEP found that the barges used to lay pipeline would generally be equipped with "an array of 8 to 12 anchors," each anchor weighing from 7 to 15 tons and held in place by cables. 2006 Denial at 34. As a barge moves forward either to lay, plow, or backfill the pipeline, anchors would strike the seabed. Islander East's own evidence indicated that each anchor footprint would likely be 1 to 3 feet deep, disturbing 200 square feet of sediment. *See id.* at 41 (citing TRC Impact Analysis Report at 30 (Feb. 12, 2002) and the "Gulfstream Report" (surveying post-installation conditions in the Gulf of Mexico)). Meanwhile, cables attached to each anchor would drag along the bottom of the sea floor, cutting into the seabed—albeit considerably less deeply than anchors—and releasing further sediment into the water column. In depths of less than 50 feet, the anchor cables would extend 1,200 feet from each side of the barge, forming a corridor of construction activity approximately 2,400 feet wide. *See id.* at 46. Although "midline buoys" would suspend part of the anchor cable above the sea floor, as much as 600 feet of each cable line would still drag along the sea floor, leaving incisions. *See id.* at 34. In waters suitable for shellfish harvesting, *i.e.*, at depths of less than 50 feet, the CTDEP concluded that the corridor affected by anchor strikes and cable sweeps would be 3.85 miles long, occupying a total area of about 1,120 acres that would no longer be available for shellfish harvesting. *See id.* at 40-41, 70, 80 (concluding that 588 acres of

existing shellfishing and 531 acres designated for shellfishing would be lost).

(2) *Islander East's Challenges to the Findings*

Islander East argues that the CTDEP exaggerates both the area and impact of these strikes and sweeps. It submits that the CTDEP erroneously included in its calculations of the anchor corridor an area of seabed bordering the exit pit and dredge section from milepost 10.9 to milepost 12, thereby inflating the area affected by anchor strikes and cable sweep by 322 acres. Further, the CTDEP erroneously assumed that the full 1,200 feet of anchor cable would sweep the sea floor. Finally, Islander East asserts that, even within the identified corridor of strikes and sweeps, the actual damage would be slight. While the first argument may have some merit, none persuades us that the CTDEP's 2006 Denial was arbitrary or capricious.

First, the CTDEP's finding that Islander East would utilize an anchor-propelled barge in the relatively shallow waters above the exit pit and dredge section may have been erroneous in light of evidence indicating that Islander East had modified its plans to avoid using an anchor array in that area. *See* Letter from Arthur J. Rocque, Jr., Comm'r, CTDEP, to Gene H. Muhlherr, Jr., Islander East (July 29, 2003); *see also* 2006 Denial, App. A at 2; Permit Application, Installation Methodology at 1. Even assuming such error, however, the evidence of anchor strikes and cable sweeps in waters between mileposts 12 and 20 was sufficient to support the CTDEP's finding of a significant loss of existing and designated shellfishing use.[12]

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[12] As described above, the CTDEP calculated the area of the anchor corridor supporting an existing or designated use of

Second, we identify no clear error in the CTDEP's conclusion that an anchor corridor scarred by anchor strikes and cable sweeps would be lost in its entirety to shellfishing. The CTDEP reached this conclusion, not because it assumed that all 1,200 feet of anchor cable would sweep the sea floor, as petitioner alleges, but because it found that the depressions left by plowing, anchor strikes, and even reduced cable sweep would make it too difficult for harvesting equipment to operate throughout the corridor. *See* 2006 Denial at 70 & n.84 (distinguishing between shellfish habitat and cultivable shellfish beds). Evidence showed that shellfishermen would not venture into such scarred terrain for fear of damaging their equipment. *See id.* at 70-71; Memorandum from John H. Volk, Conn. Dep't of Agric., to Sue Jacobson, CTDEP at 2 (Oct. 4, 2002) (noting that topographic irregularities caused by dredging will render "area unsuitable for commercial fishing and shellfishing" and that project "will result in a multitude of 'scars' and significant benthic irregularities caused by numerous sets of anchors, spuds, and cable sweeps . . . ."). Larry Williams, a commercial shellfisherman, not only testified that shellfish harvesting dredges could not operate in areas of topographical irregularity, *see* Conn. Siting Council Hearing Tr. at 128, Apr. 17, 2002 ("[I]f you're left with a bottom topography that's so upset and irregular and soft here and hard there . . . it basically becomes undredgeable, the dredges don't work, they'll cut into a high spot,

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shellfishing at 1,120 acres. *See* 2006 Denial at 70. Excluding the seabed from mileposts 10.9 to 12, the projected anchor corridor over shellfishing area appears to be reduced to 798 acres. *See* id. We note that none of these acres are within the jurisdiction of the Town of Branford, as the boundary separating Branford shellfish beds from state shellfish leases lies between mileposts 11 and 12. *See* Petitioner's Br., Ex. B.

they'll drop into a low spot . . . it just doesn't work."), he stated that he had personally observed such irregularities in an area damaged by a 1991 installation of a natural gas pipeline, the "Iroquois pipeline," *see* 2006 Denial at 43 (citing Conn. Siting Council Hearing Tr. at 93, 96, Apr. 17, 2002). While Williams testified that it might be possible to navigate around anchor strikes and cable sweeps "if the holes were mapped with GPS coordinate geometry" and "sonar mapping was furnished," Conn. Siting Council Hearing Tr. at 99, Apr. 17, 2002, nothing in the record demonstrated the availability of this technology, much less the likelihood of its successful application or Islander East's commitment to supplying it. *Cf.* Letter from Gene Muhlherr, Jr., Islander East, to Charles H. Evans, CTDEP (May 27, 2003)(referencing Islander East's commitment to provide an "'as built' survey of the coordinates *of the pipeline* following construction," with no mention of mapping individual anchor strikes or cable sweeps (emphasis added)). On this record, the CTDEP's failure to reference speculative and extraordinary mitigation measures in its consideration of lost use hardly renders its conclusions arbitrary or capricious.

Third, the CTDEP did not act arbitrarily or capriciously in failing to embrace Dr. Zajac's opinion that the proposed pipeline would result in only minimal cable scarring. *See* Conn. Siting Council Hearing Tr. at 55, Apr. 12, 2002 (testifying that "cable sweeping would probably disturb [only] the upper . . . few centimeters of the sediment"). Evidence before the agency indicated that the degree of cable scarring can vary widely even in a single body of water depending on the distance of the cable from the anchor and the composition of the seabed. *See* 2006 Denial at 41 (noting that, in pipeline installation in Gulf of Mexico, depth of cable scarring ranged from 4 to 12

inches);[13] *cf. Power Auth. of New York v. FERC*, 743 F.2d 93, 111 (2d Cir. 1984) (observing that, "although reasonable minds could differ as to the inferences that might be drawn from the proof," agency's finding supported by substantial evidence must be upheld). Further, it was not arbitrary or capricious for the CTDEP to consider sediment dispersal caused by sweeps as well as strikes in assessing the loss of waters available for shellfishing. The CTDEP's finding relied on the FEIS, which referenced anchor strikes and cable sweeps without differentiation in observing that, once sediment is released from the sea floor, it loses density and cohesiveness and becomes more susceptible to erosion. *See* 2006 Denial at 47. The FEIS further indicated that long-lasting depressions associated with anchor strikes and cable sweeps can act as "sediment traps," which, in turn, can lead to "anoxic sediments that develop considerably different communities from the original deposits" and "a long-term conversion of benthic habitat." *Id.* (quoting FEIS 3-65 (internal quotation marks omitted)).

While the FERC concluded that remedial measures might be devised to minimize this effect, there was record evidence before the CTDEP suggesting that depressions caused by strikes and sweeps would, in fact, be long lasting. Shellfisherman Williams testified that, over a period of some four years, he had observed the persistent scarring to the seabed caused

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[13] The CTDEP was careful to note that differences in seabed composition and current velocity precluded an assumption that the impacts experienced in the Gulf would translate to the Sound. *See* 2006 Denial at 43 n.58. Nevertheless, the report provided some evidentiary support for the CTDEP's skepticism as to Islander East's prediction of minimal cable scarring.

by installation of the Iroquois gas pipeline. *See id.* at 43. Islander East submits that, because the CTDEP approved the Iroquois pipeline as consistent with Connecticut's water quality standards, it cannot rationally conclude otherwise with respect to Islander East's pipeline proposal. This argument misses the essential point that the CTDEP, with the benefit of hindsight, has now concluded that the Iroquois pipeline failed to comply with the state's water quality standards, and it is this realization that now informs its denial of the Islander East proposal. It is well recognized that "an agency must be given ample latitude to adapt [its] rules and policies to the demands of changing circumstances." *State Farm*, 463 U.S. at 42 (internal quotation marks and citations omitted). Here the changed circumstances are the observed adverse effects of the Iroquois pipeline despite the passage of time. In *Islander East I*, we faulted the CTDEP for failing to acknowledge that Islander East proposed to employ more advanced technology than had been available at the time of the Iroquois pipeline installation, *see* 482 F.3d at 103, or to "point to evidence indicating that [such improvements] would have been inadequate to avoid the topographic irregularities caused by the Iroquois installation," *id.* at 104. The CTDEP has now acknowledged considerable technological advancements since the installation of the Iroquois pipeline; nevertheless, it found that Islander East's employment of improved techniques would, at best, "minimize . . . but not eliminate" the anticipated effects of "anchor strike and cable sweep impacts." 2006 Denial at 43. Substantial evidence supports the CTDEP's finding that the technological and methodological advances that distinguish the Islander East pipeline proposal from the Iroquois pipeline would not sufficiently reduce the

risk of damage caused by anchor strikes and cable sweep to avoid the loss of the existing and designated shellfishing use of a significant area. In the face of scientific or technical uncertainty as to the scope of adverse effects from proposed action, nothing in the APA prevents an agency from considering a "worst case" scenario. *Cf. New York v. Reilly*, 969 F.2d 1147, 1152 (D.C. Cir. 1992) ("[E]ven if [agency's] prediction did take into account the worst case scenario, its action would be permissible."). Thus, we cannot conclude that the CTDEP's consideration of the adverse consequences of the Iroquois pipeline installation in issuing the 2006 Denial was arbitrary or capricious.

Islander East further argues that it was arbitrary and capricious for the CTDEP to deny it certification despite, in 2002, allowing the Cross Sound Cable Company to bury heavy power transmission cables beneath Long Island Sound. The latter project is distinguishable in at least two important respects. First, it does not appear to have presented significant problems of anchor strikes and cable sweeps. The narrower trench needed to accommodate power cables was dug, not with a mechanical plow towed by barges, but with a "Smartjet" rig, a remotely operated vessel that used "pressurized water to fluidize sediments into which the . . . cables would settle." Conn. Siting Council, Finding of Facts, Dkt. No. 208 at 13 (Jan. 3, 2002); *see also* Task Force on Long Island Sound, Comprehensive Assessment and Report, Part II, Environmental Resources and Energy Infrastructure of Long Island Sound at 78 (June 3, 2003) ("Task Force Report"). The schematics attached to the Cross Sound Cable Company's permit application indicate a 100-foot "work corridor," with no mention of an "anchor corridor" or indication of anchor use. *See* CTDEP, Permit No. 200102720-MG (Mar. 17, 2002).

Second, while the Cross Sound Cable project traversed shellfishing beds, the beds at issue were dormant with no evidence of foreseeable future use. The record indicated that the cable path traveled 3.75 miles along an existing navigation route, the Federal Navigation Channel, in order "to substantially avoid cultivated shellfish beds." Task Force Report at 78. To the extent shellfish beds were delineated within the Federal Navigation Channel, they were "not now, and have not been actively cultivated for at least the previous five years." Conn. Siting Council, Findings of Fact at 21. Thus, in contrast to this case, where the CTDEP found that Islander East's pipeline project would cause a long-term loss of shellfishing beds in existing or foreseeable future use, the Cross Sound Cable project implicated only dormant beds that were expected to remain so. Where circumstances are thus distinguishable, the different CTDEP rulings do not demonstrate arbitrary or capricious decision-making. *See State Farm*, 463 U.S. at 42.

In sum, in light of the totality of the evidence supporting the CTDEP's finding of lost use, as well as its finding that Islander East had failed to demonstrate that it would (or even could) restore the scarred seabed within a reasonable time to its pre-installation condition, we conclude that the agency did not act arbitrarily or capriciously in denying a water quality certification to build the pipeline.

b. *Engineered Backfill*

While the CTDEP's findings as to the lost shellfishing use caused by anchor strikes and cable sweeps, by itself, warrants our denial of Islander East's petition, that conclusion is further supported by the agency's identified concerns regarding the ability of engineered backfill to restore 5.5 acres of shellfish habitat that

would be destroyed by dredging the exit pit and the adjoining mile-long trench. *See* 2006 Denial at 65-69, 81.

Once again, the CTDEP's concern derives from the site of the proposed pipeline. The exit pit and trench would be dredged in nearshore waters, 13 to 20 feet deep, that are used and designated for shellfishing. Although Islander East had originally planned to mound dredged material adjacent to the pit and trench for subsequent backfill, evidence indicated that waves and wind-generated currents in the affected waters posed a serious risk of dispersing sidecast spoil into the water, resulting in sedimentation. *See id.* at 36. Apparently, sediment deposits a few millimeters thick may smother some benthic species, including "juvenile oysters." *Id.* at 51-52 (citing Letter from John C. Roberge, Roberge Associates Coastal Engineers, LLC, to John Opie, First Selectman, Town of Branford at 2 (Feb. 4, 2004)). To alleviate these concerns, Islander East proposed to remove the dredged sediment and to use an engineered material consisting of small rocks and sand to refill the trench. In denying certification, the CTDEP noted "[d]iscrepancies in the record" regarding the precise composition of this engineered material, which made it impossible to assess "the full extent of resulting sedimentation" and the "scour resistance" of the backfill. *Id.* at 38-39. More important, the CTDEP noted that no "reasonable prediction of benthic community establishment" could be made without knowing "the exact sediment grain size difference between the existing native substrate" that would be removed "and the new backfill" that would replace it. *Id.* at 39.

Islander East concedes what the record confirms, *i.e.*, that "[t]he composition of the backfill is unresolved." Petitioner's Br. at 28; *see* 2006 Denial at 36-37 (com-

paring Islander East proposal to use sand on top of rock or gravel less than 4 inches in diameter with Haley & Aldrich Report recommending no more than 2-inch diameter gravel together with .187-inch coarse sand and small percentage of fine sand). Nevertheless, it submits that it should not be denied a permit for its good faith efforts to mitigate the CTDEP's concerns about the sedimentation of dredged materials. Islander East's argument might be persuasive if the CTDEP had imposed a supplemental condition on an otherwise meritorious certification application. But that is not the case. It is undisputed that the usual practice of casting dredged spoil to the side of a trench for subsequent backfill raised legitimate concerns about sedimentation along the proposed pipeline route. Thus, Islander East's application was not meritorious without the inclusion of a concrete proposal for adequate backfill mitigation measures. In proposing alternative backfill materials to carry its certification burden, Islander East introduced new concerns about the suitability of foreign backfill as shellfish habitat. It was not arbitrary or capricious for the CTDEP to have noted those concerns or to have sought their resolution preliminary to granting certification.

In *Islander East I*, we faulted the CTDEP for failing both to cite record evidence supporting its summary conclusion that engineered backfill would "permanently degrade the benthic substrate along the pipeline route," 482 F.3d at 102, and to acknowledge evidence suggesting likely recovery, *see id.* at 102-03. The agency has now addressed both points at length, explaining why it gave "little weight" to those studies predicting rapid restoration of shellfish habitat based on seabed recovery from natural disturbances. 2006 Denial at 66. The CTDEP expressed

> no reason to doubt that, under perfect circumstances, *in the native substrate*, benthic organisms would eventually recover. The three to five year recovery predictions offered in the above-referenced scientific studies are generally based on observations of benthic community succession following dredging or other disturbances such as storm events which redeposit[] naturally-occurring sediment which is not the case with the activity proposed by Islander East. The habitat needs to recover before the benthic organisms can recolonize the area. . . . [T]he primary factor in recovery time is first obtaining habitat suitability.

Id. at 67 (emphasis in original). Moreover, the agency noted no available studies "that offer predictions on benthic colonization in an entirely new, and very different material than the native substrate." *Id.* at 68. Observing that the native substrate to be displaced by Islander East's proposed pipeline consisted of compact, fine-grained sediments, *see id.* at 69, the CTDEP cited evidence indicating that the replacement of such material with a predominantly rocky backfill would not only deprive soft shellfish of a medium into which they could burrow, it would also attract shellfish predators. *See id.* at 6, 68-69 (citing comments of John H. Volk, Connecticut Department of Agriculture). Although Islander East submitted a report indicating that rocky backfill could actually promote habitat diversity by "improv[ing] conditions for two valuable commercial species, oyster and lobster," TRC Envtl. Corp., Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques § 4 (Feb. 17, 2003), we cannot conclude that the CTDEP acts arbitrarily or capriciously when it fails to view a potential in-

crease in certain shellfish species as an adequate offset for the decrease in other species, such as soft-sediment clams. This sort of balancing falls squarely within the agency's environmental expertise, and is consistent with the federal anti-degradation mandate that "[s]pecies that are *in* the water body and which are consistent with the designated use . . . must be protected, even if not prevalent in number or importance." Questions and Answers on Antidegradation, *in* EPA, *Water Quality Standards Handbook*, App. G at 3 (2d ed. 1994) (emphasis in original).

Islander East submits that the CTDEP failed to note its alternative proposal to backfill the trench with sand, a substance that would avoid the noted predator concern. *See* Letter from Joe Reinemann, Islander East, to Joanne Wachholder, FERC, *et al.* (Apr. 17, 2003). While this evidence may demonstrate Islander East's good faith willingness to explore alternatives, absent a further showing that a sand backfill would likely restore the affected 5.5 acres to shellfish habitat, we identify no abuse of discretion in the CTDEP's failure specifically to address this alternative. *Cf.* 2006 Denial at 66, 69 (noting that original substrate was plastic and cohesive, so that, while sand would be a better backfill than rock, it would not be as good as silt in restoring shellfish habitat). This is not to foreclose the possibility that some engineered backfill might be identified to provide adequate assurance of habitat restoration along the proposed pipeline. But in the absence of such a showing by Islander East, we conclude that the CTDEP did not act arbitrarily or capriciously in relying on the lost use attributable to backfill concerns as well as the lost use attributable to anchor strikes and cable sweeps in denying certification.

c. *Sedimentation and Drilling Fluid Release*

The CTDEP cited two additional reasons for denying Islander East a water quality certification: (a) dredging and plowing (even with spoil removal) would cause sedimentation, adversely affecting more than 80 acres of shellfish habitat, *see id.* at 50-55; and (b) planned and unplanned releases of drilling fluid would destroy at least 3.55 acres of shellfish habitat, *see id.* at 56-65. While both concerns are legitimate, we identify some evidentiary issues with the CTDEP's conclusions that might warrant remand in the absence of the aforementioned grounds to deny the petition.[14]

(1) *Sedimentation*

In its discussion of sedimentation, the CTDEP cited evidence that sediment deposits of 1 millimeter could cause 50 percent mortality in some benthic species while deposits of 2 millimeters could cause 100 percent mortality in the same species. *See id.* at 51-52 (noting further that juvenile oysters could be adversely affected by "as little as 3 millimeters of sediment"). While applauding Islander East's use of installation methods that would reduce sedimentation, the CTDEP concluded that sedimentation associated with the project would still harm a sufficiently "significant area of both natural habitat and prime shellfishing beds" to preclude certification. *Id.* at 50-51.

In choosing among conflicting reports of the degree of sedimentation likely to result from installation of the Islander East pipeline, the CTDEP found the study conducted by Roberge Associates "most reliable

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[14] We discuss these concerns only to provide guidance in the event the parties should renew their discussions about the possibility of installing the proposed pipeline consistent with the requirements of federal and state law.

in terms of predicted amount and extent of sediment dispersion." *Id.* at 53. That study estimated that a 3-millimeter layer of sediment would be deposited over approximately 35 acres of sea floor stretching 131 feet from the centerline of the pipeline trench. *See id.* at 53. Almost all of this acreage qualified as town or state shellfish beds. *See* id. at 55 (indicating that 3-millimeter sedimentation would affect 26.52 acres of Branford shellfish beds and 7.97 acres of state shellfish beds). The Roberge study estimated that dredging would also deposit a 1-millimeter layer of sediment over approximately 70 acres. *See* Letter from John C. Roberge, Roberge Associates Coastal Engineers, LLC, to John Opie, First Selectman, Town of Branford at 3-4 (Feb. 4, 2004).

In its brief to this court, the CTDEP now concedes that the Roberge study is mathematically flawed, resulting in a significant overstatement of the area affected by sedimentation. The agency reduces its identification of the affected area to 6.2 acres covered by 3 millimeters of sediment and 12.3 acres covered by 1 millimeter of sediment. *See* Respondent's Br. at 51 n.24. Islander East asserts that this recalculation is itself flawed because it double counts certain acres. *See* Petitioner's Reply Br. at 23 n.27. We need not resolve this dispute because, even if were to assume the correctness of the CTDEP's recalculation, the agency does not explain how discrete sedimentation exposure in this smaller area will cause more than a temporary loss of either benthic species or use of the waters for shellfishing. Thus, were sedimentation the sole ground for denying certification, we would remand to afford the agency the opportunity to address this question. *See, e.g., Li Hua Lin v. United States Dep't of Justice*, 453 F.3d 99, 111 (2d Cir. 2006) (remanding based on factual error critical to agency conclusion).

We do not do so because, for reasons already discussed, we conclude that the denial of certification is rationally supported by other findings of lost use satisfactorily grounded in record evidence. *Cf. National Ass'n of Home Builders v. Defenders of Wildlife*, 127 S. Ct. 2518, 2530 (2007) ("'In administrative law, as in federal civil and criminal litigation, there is a harmless error rule.'" (quoting *PDK Labs., Inc. v. United States Drug Enforcement Admin.*, 362 F.3d 786, 799 (D.C. Cir. 2004))).

(2) *Drilling Fluid Release*

In its initial denial of certification, the CTDEP conclusorily found (1) that the use of horizontal drilling technology at the first step of pipeline installation was inconsistent with state water quality standards because 455 barrels of drilling fluid would be released when the drill exited the sea floor at milepost 10.9; and (2) that unplanned releases of fluid, or "frac-outs," would occur in the course of drilling. In the absence of further findings as to the likelihood of frac-outs and the adverse consequences of fluid releases to shellfish habitat, we held this rationale insufficient to support denial. *See Islander East I*, 482 F.3d at 100 (noting that "we may not supply a reasoned basis for the agency's action that the agency itself has not given" (quoting *State Farm*, 463 U.S. at 43)). In its 2006 Denial, the CTDEP addressed both points.

As evidence of the likelihood of frac-outs in the Islander East project, the CTDEP cited reports of such occurrences "in at least half of the [horizontal drilling] projects it ha[d] regulated." 2006 Denial at 61. Further, noting that frac-outs are most likely to occur at substrate transitions, *e.g.*, from a sedimentary to a rocky area, the CTDEP observed that the geological characteristics of the Thimble Islands indicated many

such transitions. *See id.* On this record, we cannot conclude that the agency's identified concern with likely frac-outs on the Islander East project was arbitrary or capricious.

To support its conclusions concerning the adverse effect of drilling fluid on shellfish habitat, the CTDEP pointed to evidence supplied by Michael Ludwig, an employee of the National Marine Fisheries Service. *See id.* at 57 & App. H. Mindful that drilling fluid is 97 percent fresh water and 3 percent bentonite clay, Ludwig explained that shellfish cannot live in fresh water. When exposed to drilling fluid, they close their shells to "hold [their] breath." *Id.* In doing so, the shellfish inevitably pull in some clay, which would lodge in their gills. As they reopen to expel the clay, the shellfish are exposed to fresh water, causing them to close again, trapping in more clay. As the cycle repeats itself, the shellfish, unable to breath, suffocate. *See id.*

The risk of such suffocation depends, in large part, on drilling fluid remaining fixed in place rather than dispersing. The evidence on this point was conflicting. While certain studies suggested rapid dissipation, *see* 2006 Denial, App. H at 3-4 (reprinting Larry Gedney, *Drilling Mud Poses Little Environmental Hazard*, Alaska Science Forum (May 7, 1984) (noting that "after an insubstantial amount of time, currents dissipated the [drilling] fluids to levels that were innocuous")); Garrett Group Ltd., Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project at 10 (May 8, 2003) (stating that drilling fluids "rapidly dissipate into any background concentrations"), other evidence indicated that drilling fluid "tends to be resistant to dispersion when placed in saline waters,"

Email from Michael Ludwig, National Marine Fisheries Service, to Sue Jacobson, CTDEP at 1 (Sept. 29, 2003). The CTDEP chose to rely on Michael Ludwig's opinion and the FEIS prepared for the FERC for the conclusion that, because "'drilling fluids flocculate [lump together] and settle to the bottom,'" 2006 Denial at 57 (quoting FEIS 3-53) (modification in original), "[d]ispersion by dilution of this gel-like mud into the water column is unlikely," *id.* (citing FEIS 3-54). Where reasonable minds might thus differ on a point, an agency's resolution of competing evidence cannot be deemed arbitrary and capricious. *See Universal Camera Corp. v. NLRB*, 340 U.S. at 488 (holding that reviewing court may not displace agency's choice between "two fairly conflicting views" of evidence).

Recognizing the risks associated with the release of drilling fluid, Islander East advised the CTDEP of its willingness to develop plans to contain and recover the substance. It submitted a containment plan offering alternative proposals, deferring its final choice until after a horizontal drilling contractor had been selected. The CTDEP found these proposals to be "vague and largely inadequate." 2006 Denial at 31; *see also id.* at 58. We cannot review this finding because Islander East has not included its alternative proposals in the appendix on appeal and the CTDEP has not filed a certified administrative record as required by Fed. R. App. P. 17(a). To the extent the CTDEP disagreed with Islander East's proposed definition of a "significant" release of drilling fluid into the Sound, *see id.* at 57-58, however, we note a concern.

Islander East's proposed threshold for identifying a "significant" release warranting removal action was based on several factors, including, *inter alia*, (1) "the

ability to contain the release within a 200 foot wide corridor centered on the HDD drill path," and (2) whether such deposits "exceed 24 inches in depth." 2006 Denial at 58. Referencing evidence that sedimentation deposits of as little as 1-2 millimeters could adversely affect benthic organisms, the CTDEP concluded that the proposed 24-inch threshold was "too high" to satisfy state water quality standards. *Id.* The CTDEP does not point to any evidence, however, supporting an analogy between the levels of sedimentation and drilling fluid that would cause a loss of shellfishing use. While we might remand to afford the agency an opportunity to clarify this point, because we have identified other reasons for agency denial of certification that are supported by record evidence, we conclude that no such remand is necessary. *Cf. National Ass'n of Home Builders v. Defenders of Wildlife*, 127 S. Ct. at 2530.

Islander East points out that although the CTDEP rejected Islander East's proposal to define a significant release by reference to fluid deposits over 24 inches deep, it had approved a nearly identical definition in connection with the Cross Sound Cable Company's monitoring of its horizontal drilling. *See* CTDEP, Permit No. 200102720-MG, App. B at 6 (Mar. 17, 2002) (including within "conditions which constitute a significant impact" on water quality "[d]rilling fluid depositional depths . . . exceed[ing] 24 inches at the interface with the containment fence"). In contrast with the CTDEP's adverse experience with aspects of the Iroquois pipeline, which, as we have noted, provided a rational basis for the agency subsequently to reject similar aspects of the Islander East proposal, the CTDEP found no adverse effects arising out of Cross Sound Cable's horizontal drilling to support its rejection of Islander East's 24-inch threshold. Indeed,

CTDEP provided Islander East with Cross Sound Cable's monitoring plan, including its definition of "significant," as a reference. *See* Letter from Charles H. Evans, CTDEP, to Gene Muhlherr, Jr., Islander East at 7 (May 5, 2003) (enclosing redacted copy of Cross Sound Cable monitoring plan and stating "monitoring plan will be required. Please refer to the enclosed sample for reference"). While Islander East may have understood this reference to signal that its proposed monitoring plan should duplicate that of the Cross Sound Cable Company's, in light of the fact that the latter project's horizontal directional drilling would affect only dormant shellfishing beds while Islander East's drilling would affect active beds, we cannot conclude that it was arbitrary or capricious for the CTDEP to conclude that stricter release monitoring was necessary to assure water quality standards in this case.

3. *Good Faith*

In *Islander East I*, we cited some evidence raising concern that the CTDEP had pre-determined to deny certification in this case, affording the pipeline proposal only perfunctory review. *See* 482 F.3d at 105. On its latest petition, Islander East includes in the record several newspaper articles reporting continued opposition in Connecticut to the pipeline, presumably to demonstrate that the CTDEP has again denied it good faith review. It further points to CTDEP actions attempting to block Islander East from conducting geological surveys as evidence of bad faith. We are not persuaded.

While the survey allegation raises some concern, the actions predate the first denial and, in any event, are not fully developed. Moreover, the surveys relate to a ground for denial not relied on in this decision.

See supra at **[36-39]**. On this record, we deem the allegation insufficient to establish bad faith with respect to the 2006 Denial.

While there is no denying the continued strong opposition to the pipeline voiced by some Connecticut residents and officials, where an agency's analysis of a controversial application is detailed and thorough, as is the case with the CTDEP's 2006 Denial, we will not readily conclude that it is infected by bad faith. While the CTDEP might have made more of an effort to resolve seeming discrepancies in or omissions from Islander East's proposal before issuing its challenged denial, its failure to do so does not demonstrate bad faith or an arbitrary and capricious decision. As we made plain in *Islander East I*, even as we ordered remand in that case, it was "Islander East's burden to demonstrate its entitlement to favorable action on its . . . application." 482 F.3d at 104. Because the CTDEP has now "adequately . . . consider[ed] important aspects of the issue," *id.*, and supported its conclusion that Islander East did not carry this burden with record evidence, Islander East must point to more than continued political opposition for us to find agency bad faith.

In so holding, we express no view as to the wisdom of the challenged denial or of a statutory scheme whereby a single state agency effectively vetoes an energy pipeline that has secured approval from a host of other federal and state agencies. It is, after all, Congress that has "provide[d] states with the option of being deputized regulators" of the Clean Water Act. *Islander East I,* 482 F.3d at 90. If Congress were to agree with Islander East that the public interests furthered by its proposed pipeline outweigh Connecticut's water quality concerns, Congress could

consider whether to dissolve the federal-state partnership it created. Until such time, however, this court is charged with reviewing the state agency's denial only to ensure that it is not arbitrary or capricious. Because we conclude that it is not, we hereby deny the petition for review.

III. *Conclusion*

To summarize, Islander East's proposed installation of a natural gas pipeline from Connecticut to New York across Long Island Sound must comport with various statutes, including the Clean Water Act. The Clean Water Act requires Islander East to procure from the CTDEP a certification that the proposed pipeline will comply with state water quality standards. Record evidence supports the CTDEP's finding that various techniques to be employed by Islander East in installing the proposed pipeline would violate state water quality standards by eliminating a significant area of nearshore waters from their existing and designated use of shellfishing. On such a record, we cannot conclude that the CTDEP's decision to deny Islander East a certificate of compliance was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). Islander East's petition for review is DENIED.

JANE A. RESTANI, *Judge,* dissenting:

I respectfully dissent from the majority's conclusion that Connecticut Department of Environmental Protection's ("CTDEP") second denial of certification for Islander East's proposed natural gas pipeline plan, *see* CTDEP, Water Quality Certification Application No. 200300937-SJ, Islander East Pipeline Co., LLC (Dec. 19, 2006) ("2006 Denial"), was supported by reasoned explanation based on record evidence and was not arbitrary or capricious. In particular, I note the majority's acknowledgment that CTDEP failed to explain properly its dismissal of an expert report on sedimentation—especially in light of CTDEP's admission that the report it relied upon was mathematically flawed and significantly overstated the affected area—and that CTDEP improperly rejected Islander East's proposed drilling plan, despite the fact that CTDEP approved and provided for reference a nearly identical plan from a prior project. I disagree with the majority's characterization of these errors as harmless, and find that there is not reliable evidence to otherwise support CTDEP's decision.

I. *Review of the 2006 Denial*

The majority correctly states that the issue is whether CTDEP was arbitrary or capricious in finding that the proposed pipeline would result in damage inconsistent with the Connecticut Water Quality Standards. CTDEP, Water Quality Standards (effective Dec. 17, 2002) ("CTWQS").

Under CTWQS surface water quality standard number two, "[e]xisting and designated uses . . . and the water necessary for their protection [are] to be maintained and protected." CTWQS at 1. As part of its antidegredation policy, the EPA requires states to

publish Water Quality Standards ("WQS") that maintain a "level of water quality necessary to protect . . . existing uses." 40 C.F.R. § 131.12(a)(1). The state has the responsibility to apply any quantitative criteria provided in the WQS, as well as descriptive characteristics. *PUD No. 1 of Jefferson County v. Wash. Dep't of Ecology*, 511 U.S. 700, 714-15 (1994). The Clean Water Act envisions that a state's WQS may list non-quantitative criteria, such as use designations, which "must be translated into specific limitations for individual projects." *Id.* at 716. Thus, while a state is free to impose narrative or open-ended criteria in its WQS, the use of such criteria does not free the state from its obligation to impose a specific limitation within the context of a particular project proposal. The agency's central task is to give open-ended criteria meaning for a particular proposed project, providing parties with the necessary guidance to participate in the regulatory process.

In the 2006 Denial, however, CTDEP declined to quantify what specific limitations would have to be met to find the proposed project consistent with the CTWQS. Rather than stating minimum thresholds, CTDEP pointed to a series of likely or potential environmental impacts that it contends would violate the CTWQS. As a court, we are powerless to set the specific limitations on water quality impacts that would be inconsistent with the CTWQS. The majority correctly notes that such a determination depends on scientific evidence and policy judgments best left to the expert consideration of an agency. *See Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 48 (1983). Although it is within the agency's authority to determine a level at which such harms are unacceptable, it must be reemphasized that "an agency's action must be upheld,

if at all, on the basis articulated by the agency itself." *Islander East Pipeline Co. v. Conn. Dep't of Envtl. Prot.*, 482 F.3d 79, 95 (2d Cir. 2006) ("*Islander East I*") (quotations omitted). Our task is to hold CTDEP to its own reasoning and judgments.

II. *Review of CTDEP's Conclusions*

A. *CTDEP's Claims Regarding Sedimentation in the Dredge Section*

CTDEP's treatment of potential sedimentation impacts in the dredge section of the project presents the most serious concern, particularly because sedimentation is cited as grounds for denial in two of CTDEP's four conclusions.[1] In finding that "a significant area of both natural habitat and prime shellfishing beds would be exposed to sedimentation exceeding normal levels and for extended periods of time," CTDEP relied heavily on expert studies on the record, finding the Roberge Report, (John C. Roberge, P.E., LLC, *Potential Sedimentation Impacts Which Could Result from Dredging* (2003) ("Roberge Report")), "to be the most reliable in terms of predicted amount and extent of sediment dispersion," (2006 Denial at 53), and dismissing the ASA Report, (Applied Science Associates, Inc., *Results of SSFATE Model Simulations, Nearshore Connecticut, Long Island Sound* (2003) ("ASA Report")), because it relied on tidal currents alone. (2006 Denial at 52-53.) On the basis of the Roberge

[1] CTDEP cites an "unacceptable impact to benthic habitats . . . indirectly through sedimentation," and states that the project will cause the "biological integrity" of the area to be "unacceptably reduced and changed as a result of the change in benthic substrate, including sedimentation." (2006 Denial at 80.)

Report, CTDEP provided a measurement of the area that would be impacted by sedimentation.

CTDEP now admits that the Roberge Report's predictions are incorrect, overstating the extent of sediment dispersion by more than a factor of four. According to Respondents' brief, the Roberge Report should have stated that the area of sediment dispersion would be 18.5 acres, not 86. (*Compare* 2006 Denial at 53, *with* Resp'ts' Br. 51 n.24.) This is far closer to the amount predicted in the ASA Report, which estimated 14 acres of sediment dispersion. (*See id.*; ASA Report at 4.)

Despite the fact that CTDEP should have considered a significantly reduced estimate of the sedimented area, Respondents now contend that "[t]he error is one of degree," and that any area of sedimentation that interferes with shellfish harvesting is inconsistent with the CTWQS. (Resp'ts' Br. 52.) This is a surprising claim. CTDEP's reasoning refers to a "significant area" of sedimentation, specifically, 86.23 acres. (2006 Denial at 50-51, 55.) Further, if any amount of sedimentation would be inconsistent with the CTWQS, it would not have been necessary for CTDEP to go to such lengths to dismiss the ASA Report's conclusions. More importantly, there is no indication in the record that CTDEP actually considered whether 18.5 acres of sedimentation would be a significant impact resulting in a partial loss of an existing use. It is not the role of the court to make such a determination on CTDEP's behalf. *See Ace Motor Freight, Inc. v. ICC*, 557 F.2d 859, 864 (D.C. Cir. 1977). CTDEP's admittedly erroneous finding of 86 acres remains the only finding before us, along with Respondents' assurances that the actual amount of sedimentation does not matter. As we stated in *Is-*

lander East I, we "'may not accept appellate counsel's *post hoc* rationalizations for agency action. It is well established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself.'"482 F.3d at 95 (quoting *State Farm*, 463 U.S. at 50).

CTDEP's strong reliance on the erroneous sedimentation findings as a basis for denial seems far from harmless error, contrary to the assertion of the majority. Because CTDEP did not consider the effects of sedimentation under the drastically reduced calculations or adequately explain its rejection of the ASA Report in light of its similarity to the new calculations, the 2006 Denial's conclusions with respect to the effects of sedimentation in the dredged section were arbitrary and capricious.

B. *CTDEP's Conclusions Regarding the Use of Backfill*

1. *Engineered Backfill*

The 2006 Denial also expressed concern over the placement of engineered backfill into the dredge trench, finding that there were significant discrepancies in the record regarding the proposed composition of the backfill, and that even if shellfish could return to a rocky backfill, shellfish predators—particularly starfish—would also colonize the area. (2006 Denial at 37, 66-68.) With respect to the backfill composition, the 2006 Denial specifically noted that an expert report called for the use of "'[r]ock or gravel of less than 4 inches in diameter,'" (*id.* at 37 (quoting TRC Environmental Corporation, *Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques* at 6 (2003) ("2003 TRC Report"))), and that Islander East's own con-

sultants recommended the use of backfill containing "mostly gravel, no more than 2 inches in diameter and coarse sand," (*id.* (citing Haley & Aldrich, Inc., *Report on Engineered Backfill Study* at 4 (2003).) Because the nature or grain size of the materials were uncertain, CTDEP concluded that it could not speculate as to what fauna might be able to inhabit the area. (2006 Denial at 38.)

The record demonstrates that the 2003 TRC Report was issued before Islander East had finalized its backfill proposal, and therefore does not contradict the later descriptions of the intended backfill as a layer of rock covered by a layer of sand. (*See* 2003 TRC Report (issued February 17, 2003).) Islander East provided a completed backfill plan on April 15, 2003, and subsequently referenced the use of two layers in the backfill. (*See* Multi-Agency Meeting Notes (Apr. 15, 2003) ("April Minutes").) The 2006 Denial, however, continued to refer to concerns related to an all-rock backfill. (*See* 2006 Denial at 70.) Similarly, the 2006 Denial repeatedly cited concerns that predators would also colonize an area filled with a rocky backfill. (*Id.* at 66, 68.) Although the record shows that the use of a two-layer sandy backfill would prevent predators from undermining shellfish colonization, (*see* April Minutes at 1), CTDEP failed to explain why it did not consider the evidence indicating negotiated changes in the composition of Islander East's proposed backfill, and the potential effects thereof.

2. *Proposed Use of Some Native Spoil*

In the 2006 Denial, CTDEP found that Islander East's "suggestions regarding disposal options . . . appear to retreat from the conclusion reached during the agency technical discussions" by seeking to use

some native spoil in the backfill area. (2006 Denial at 37.) CTDEP expressed concern that the proposal to return excess spoil to the HDD exit area was contradicted by Islander East's prior statements to CTDEP, would be "inefficient and slow," and would "increase sedimentation." (2006 Denial at 38 (quotations omitted).)

CTDEP failed to acknowledge, however, that plans to use some native spoil to fill the HDD exit pit had existed since the beginning of the process. (*See* Project Meeting Minutes at 2 (Mar. 4, 2003) (stating that Islander East intended to dispose of a maximum of 25,000 cubic yards of dredged sediment, and that it was "possible to return spoil to the HDD exit hole or to use spoil as a top dressing material to the engineered backfill"); April Minutes at 1 (stating that spoil could be placed over rock laid in the HDD exit pit).) The fact that Islander East was prepared to use a limited amount of dredged material is therefore not at odds with its contention that using dredged sediment to the exclusion of engineered backfill would not be practical. Thus, in addition to its failure to consider negotiated changes in the composition of engineered backfill, CTDEP neglected to consider fully record evidence of the proposed options for use of some native spoil in the backfill area.

C. *CTDEP's Claims Regarding the Plow Section*

The 2006 Denial found that anchor strikes, cable sweeps, and plow impacts resulting from the use of a subsea plow after mile 12 would disrupt the sea floor, rendering it uneven. (2006 Denial at 47.) In support of its conclusion that disturbed sediments would settle into surface irregularities, CTDEP referenced two projects that have reportedly suffered long-term scarring: the Iroquois Pipeline between Connecticut and

Long Island and a series of electric cables installed on the floor of the Hudson River. (*Id.* at 43, 47-48.) CTDEP failed to address, however, record evidence regarding the installation of the Cross-Sound Cable, showing that it resulted in little or no impact on shellfish habitat. (*See* Task Force on Long Island Sound, *Comprehensive Assessment and Report: Environmental Resources and Energy Infrastructure of Long Island Sound* at 78-79 (2003).) Although the Cross-Sound Cable is a comparable utility project in Long Island Sound, installed more recently than either the Hudson River cables or the Iroquois Pipeline, CTDEP did not explain why it discounted record evidence that the plowing resulted in little or no impact, or why the Cross-Sound Cable's trench construction was distinguishable from Islander East's proposal.[2] It is not our responsibility to search the record for such distinctions. As we noted in *Islander East I*, "it was Islander East's burden to demonstrate its entitlement to favorable action on its WQC application, [but] it was CTDEP's burden adequately to consider important aspects of the issue." 482 F.3d at 104.

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[2] The majority finds a distinction on the grounds that, "in contrast to this case, where the CTDEP found that Islander East's pipeline project would cause a long-term loss of shellfishing beds in existing or foreseeable future use, the Cross Sound Cable project implicated only dormant beds that were expected to remain so." Maj. Op., *ante* at 30. Under the CTWQS, however, both "[e]xisting and designated uses" are protected. CTWQS 1. In addition, it is not clear from the record that the potentially affected areas in this case had been recently used for shellfish cultivation, nor is it the responsibility of the court to draw such distinctions from the evidence where the agency neglected to do so.

D. *CTDEP's Conclusion Regarding Islander East's Proposed Use of HDD*

Although CTDEP found that shellfish in the drilling exit pit, or in an area affected by a frac-out, would die of exposure to drill fluid, the 2006 Denial did not cite record evidence indicating that wave energy might disperse the fluid, or address other record evidence suggesting that dispersion does occur. Although there is evidence on the record indicating that releases of drill fluid would likely be "small and isolated, . . . or rapidly dissipate," (Garrett Group, Ltd., *Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project, through the Nearshore Area of Long Island Sound—Branford, CT* at 10 (May 8, 2003)), the 2006 Denial does not explain why it assumed that drill fluid would not disperse before the suffocation of the shellfish populations not removed prior to construction. While the majority indicated that reasonable minds might differ on the implications of the evidence on the record, it is not the responsibility of the court to comb the evidence to derive such implications where the agency neglected to do so.

In addition, even assuming that drill fluid would not disperse quickly enough to avoid shellfish suffocation, CTDEP dismissed all of Islander East's proposed mitigation and remediation plans. (*See, e.g.*, 2006 Denial at 31, 58.) CTDEP refused to consider Islander East's containment plan and claimed that Islander East's proposed monitoring and operations plan failed to include an appropriate definition of a "significant release" of drill fluid. As noted by the majority, however, CTDEP approved a nearly identical definition used in a monitoring plan provided by the Cross-Sound Cable Company. CTDEP also failed

to identify reasons why the use of alternative HDD technology was acceptable in the Cross-Sound Project, but not here. It was CTDEP's responsibility to identify reasons to justify its inconsistent treatment of the plans, and it failed to do so.[3]

E. *CTDEP's Finding that the Anchor Corridor Would Include the Dredge Section*

The 2006 Denial also concluded that the project would create an anchor corridor of 4,045 acres, approximately 1,120 of which are in existing and potential shellfish lease areas, an acreage characterized by CTDEP as "unacceptably large." (2006 Denial at 41, 70, 80.) As noted by the majority, CTDEP erroneously included in this calculation 322.4 acres in nearshore waters that were incorrectly assumed to be subject to anchor strikes and cable sweeps, and failed to address Islander East's proposed alternative means of installing the pipeline in the dredged area.

In its modified proposal, Islander East provided that a stationary barge could be used to assemble the necessary pipeline between mileposts 10.9 and 12 instead of laying the pipe from a barge directly into the dredged trench. (*See* Islander East Pipeline Project, Permit Application for: 401 Water Quality Certificate, Marine Pipeline Installation Methodology 1, 9.) Following this method, "a winch mounted on a construction vessel at the HDD exit hole will be used to pull two strings of pipe, each approximately one mile long, from the laybarge to near the exit hole." (*Id.* at 1.) Thus, "[t]he HDD pipe string [could] be installed by the laybarge either by standard operations or by

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[3] Also as noted by the majority, these conclusions are particularly troubling because the Cross-Sound monitoring plan was provided as a reference to Islander East.

remaining stationary and [using] a winch mounted on a separate vessel . . . to pull the pipeline off the laybarge to the HDD exit hole." (*Id.* at 9.) CTDEP did not address the possibility of using this method to install the pipe, and therefore overestimated the impact by over twenty-five percent.[4] CTDEP's conclusions on the basis of these calculations[5] are therefore unsupported.

F. *CTDEP's Failure to Address Mitigation Measures*

Finally, CTDEP should have investigated the possibility of imposing conditions requiring the remediation of impacted areas in the dredged and plowed sections. Record evidence makes repeated references to the use of remediation plans as conditions to certificate approval. (*See, e.g.*, Conn. Siting Council, Cross-Sound Cable Co., LLC, Application for a Certificate of Envtl. Compatibility and Public Need, Findings of Fact at 22 (Jan. 3, 2002).) The record also contains evidence indicating that proper remediation measures might encourage shellfishing interests to harvest within the anchor corridor. (*See, e.g.*, Williams Test., Hr'g Tr. 98:6-12, 19-20 (stating that fishing around anchor holes would be possible with buoys and "a buffer zone near the holes").) Other mitigation

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[4] CTDEP calculated that 4,045 acres would fall within the anchor corridor created by the barges, but that only 1,120 acres of the corridor support an existing or designated use of shellfishing. (*See* 2006 Denial at 70.) CTDEP found that the use of this area would be lost in its entirety due to anchor strikes and cable sweeps. (*Id.*) Subtracting the 322.4 acres incorrectly assumed to be affected leaves only 797.6 acres of negatively impacted shellfish habitat. We do not have CTDEP's views on that impact.

[5] These figures are, according to Respondents, "[t]he only specific acreage impact mentioned in [CTDEP's] conclusion as a basis for denial." (Resp'ts' Br. 52.)

measures include notification of impending construction, removal of shellfish from the work area, reseeding of beds in the work area at Islander East's expense, and provision of pipeline surveys. (*See* Islander East Pipeline Project, Response to Request for Additional Information, Impacts Analysis Report at 36 (2003).) Although its failure to address possible mitigation measures in itself does not render CTDEP's conclusions arbitrary and capricious, based on this record, CTDEP should have addressed the possibility of conditioning approval on remediation of anchor strikes and topographical irregularities, and the possibility of providing surveys to shellfishing interests that would allow for renewed harvesting within the anchor corridor.

III. *Conclusion*

While there may have been a reasoned approach that CTDEP could have taken to justify its conclusion based on the evidence available on the record, CTDEP's inconsistent treatment of the evidence continues to suggest that its denial of certification for the proposed pipeline may have been a foregone conclusion. As we indicated in *Islander East I*, "[a]ny effort by the CTDEP to pursue a 'strategy' to justify a foreordained opposition to the pipeline would be incompatible with a reviewing agency's mandate to use its expertise to come to a reasoned decision supported by substantial evidence." 482 F.3d at 105. The fact that the agency's decision would have been the same regardless of the errors on the record is insufficient to show that the 2006 Denial was not arbitrary and capricious, or that the errors noted by the majority were harmless.

In addition, the majority gives significant credit to CTDEP for its inclusion of more "voluminous" infor-

mation in the 2006 Denial, stating that the panel reached its decision in *Islander East I* "largely because of the paucity of findings made by the CTDEP" in the original determination. Maj. Op., *ante* at 18. Our review is not relative with respect to the CTDEP's prior findings reviewed in *Islander East I*, and the majority's determination that CTDEP issued more detailed analysis in the 2006 Denial does not indicate that the agency's conclusion is not still arbitrary and capricious. Although a lack of record evidence may certainly indicate a lack of support for an agency's findings, the converse is not necessarily true. It is insufficient for an agency to provide "voluminous" information in support of its conclusion where such information is erroneous, dismissed by the agency without adequate explanation, or fails to fully explain the agency's decision. I do not wish to provide such an incentive here. While the 2006 Denial provides a lengthy explanation of the reasoning that led CTDEP to deny Islander East's WQC, the inconsistencies in the reasoning, CTDEP's failure to consider relevant evidence on the record, and the manifest errors in the evidence relied upon by CTDEP, leave me with no choice but to conclude that the 2006 Denial is arbitrary and capricious.

APPENDIX B

[State of Connecticut
Department of Environmental Protection]
[December 19, 2006]

Water Quality Certification Application
#200300937-SJ
Islander East Pipeline Company, LLC

Executive Summary

The Islander East Pipeline Company, LLC has proposed to construct a natural gas pipeline that crosses Long Island Sound from Juniper Point in Branford, Connecticut to Wading River in Long Island, New York. The application under consideration by this Department pursuant to Section 401 of the federal Clean Water Act for consistency with Connecticut's Water Quality Standards ("WQS") includes three sequential construction methodologies—horizontal directional drilling ("HDD"), dredging and backfilling, and plowing—each with a distinct set of environmental impacts. The affected area in Branford, the Thimble Islands, is noted for its high water quality, unique geological features, valuable shellfish habitat, and active shellfish industry.

The WQS state:

1. It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, *shellfish* [emphasis added], and wildlife and recreation in and on the water shall be achieved.

2. Existing and designated uses such as propagation of fish, *shellfish* [emphasis added], and

wildlife, recreation, public water supply, agriculture, industrial use and navigation, and the water necessary for their protection is to be maintained and protected.

After a thorough review and consideration of the record as directed by the U.S. Court of Appeals for the Second Circuit in its October 5, 2006 decision, the Department finds that:

1. The waters of the Thimble Islands region have been assigned a Water Quality Classification that requires exceptionally high water quality and habitat conditions be maintained in order to fully support existing and designated uses.

2. Shellfish harvesting is specifically identified in the Water Quality Standards as a designated use for this area.

3. The existing high water quality conditions, in concert with the fine-grained cohesive seafloor sediments of the Thimble Islands region of Long Island Sound currently provide exceptionally high quality shellfish habitat and historical records confirm that shellfish harvesting is an existing use[1] for water in this area.

4. Connecticut's Water Quality Standards, consistent with the federal statutory mandate at 40 C.F.R. §131.12(a)(1), prohibit any change in water quality conditions if that change will result in the loss of an existing use.

5. Dredging would directly eliminate an existing designated use (commercial shellfish beds) in

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[1] Existing uses are defined by federal law as uses that have actually occurred since November 28, 1975.

an area of approximately 5½ acres, and this dredged area would be backfilled with non-native coarse stone.

6. The use of engineered backfill (non-native coarse stone) would permanently and substantially alter the seafloor, and the applicant has not met its burden of demonstrating that the habitat for seafloor (benthic) organisms and their community structure will recover to pre-project conditions within a reasonable period of time, if ever.

7. The engineered backfill would prevent future commercial shellfishing in this area.

8. Dredging, plowing, anchor strikes and anchor cable sweeps would alter benthic habitat and seafloor contours within a corridor encompassing approximately 1,119 acres of existing and potential shellfish resources. The seafloor disturbance caused by these operations would result in the loss of commercial shellfish harvesting in an area of 588 acres and eliminate 531 acres of submerged lands from future shellfish harvesting.

9. Bottom sediments disturbed during dredging would become suspended in the water, dispersed by currents and re-deposited on shellfish resources surrounding the dredged area resulting in smothering of benthic organisms and damage to shellfish habitat for a period of years.

10. Drilling fluid used during the proposed horizontal directional drilling operation would be released onto the seafloor, by design and possibly as a result of unintentional release, at

which time some of the bentonite would enter the water and subsequently settle onto the surrounding seafloor smothering benthic organisms and habitat.

The use of an engineered backfill would permanently eliminate the existing productive shellfish bed habitat and create an entirely new habitat type that may be incapable of supporting the existing biological integrity of the natural habitat in contravention of the WQS No. 1 and No. 2. The new coarser backfill material, in addition to the variation in bottom contours caused by the direct bottom disturbance from equipment operation, would create an obstacle to the existing water-dependent agricultural use of shellfishing in contravention of WQS No. 2. The sedimentation impacts of this pipeline construction also violate the State's WQS No. 1 and No. 2 by creating a situation that does not maintain the chemical, physical, and biological integrity of surface waters and, as such, the project fails to protect the existing and designated uses of the receiving waters.

For these reasons, the Department has again concluded that approval of the proposed pipeline project would be inconsistent with the State of Connecticut Water Quality Standards. Specifically, the proposed project would be inconsistent with the State's Anti-Degradation Implementation Policy as stated in Standard 2. This Standard, required by federal law, mandates that designated uses be achieved and maintained where feasible and existing uses and the level of water quality necessary to support those uses be protected in all cases without exception.

It is important to note that any single inconsistency with the Water Quality Standards is sufficient grounds for denial of the application. Based on

the foregoing, Islander East has not met its obligation of determining that the proposed activity is consistent with the State's Water Quality Standards.

Determination

In accordance with Connecticut General Statutes Section 22a-2, the Commissioner of the Department of Environmental Protection has jurisdiction over all matters relating to the preservation and protection of the air, water and other natural resources of the state. Pursuant to Connecticut General Statutes Sections 22a-359 through 22a-361, the Department has regulated dredging and the erection of structures and the placement of fill in the tidal, coastal and navigable waters of the state since 1971, and its predecessor agencies have regulated such work since 1939. In implementing these responsibilities, the Department has evaluated over 6,500 applications for impacts to the environment, navigation, and coastal uses such as recreation and shellfishing since 1971.

The proposed work was evaluated by the Department for compliance with the applicable provisions of Sections 301, 302, 303, 306 and 307 of the Clean Water Act, the State of Connecticut's Water Quality Standards[2] including the Connecticut Anti-Degradation Implementation Policy, Water Quality Criteria adopted pursuant to Section 22a-426 of the Connecticut General Statutes, and the goals and policies of Chapter 444 of the Connecticut General Statutes. Based on this review, the Department has determined that the proposed work in the proposed location is inconsistent with the Water Quality Standards. The work, as proposed, would adversely affect

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[2] Connecticut's most recent water quality standards were adopted effective December 17, 2002.

water quality, prohibit the existing and designated uses of the receiving waters for an undefined period of time and alter the existing biological integrity of natural habitats in the Thimble Islands region. In addition, Islander East failed to provide an adequate application to establish that impacts to existing water quality, benthic resources and water dependent uses have been minimized to the greatest extent practicable. Accordingly, the Department hereby denies Water Quality Certification of Application #200300937-SJ in accordance with Section 401(a)(1) of the Clean Water Act.

The Record

In making this determination, the Department has considered the points raised by the U.S. Court of Appeals for the Second Circuit in its October 5, 2006 decision and, as directed by the Court, has conducted the type of review required by law of the administrative record in connection with Islander East's WQC application. A majority of the materials provided by Islander East in support of its WQC application were originally submitted as appendices to the Structures, Dredging and Fill/Tidal Wetlands and 401 Water Quality Certification application ("SDF/TW/WQC application") dated February 13, 2002. This application, DEP R. 7, contains a number of documents that will be referred to throughout this Decision. For citation clarity, these frequently referenced items from Attachment F of DEP R. 7, will be referred to as follows:

- "Community Structure Survey"—Pellegrino, "Macrobenthic Community Structure Along The Proposed Islander East Gas Pipeline Route In Long Island Sound," January 2002;
- "Bottom Characterization Survey"—Pellegrino,

"Bottom Characterization Surveys of Selected Subtidal and Nearshore Environments Off Juniper Point," January 2002;

- "Soil Test Results"—Haley & Aldrich, Inc., "Report On Laboratory Soil Test Results Natural Gas Pipeline Crossing Long Island Sound, Branford, Connecticut To Wading River, New York," January 2002;
- "Marine Geophysical Survey"—Ocean Surveys, Inc. ("OSI"), "Final Report Marine Geophysical Survey Program Islander East Pipeline Branford, CT to Wading River, NY," May 18, 2001;[3]
- TRC Environmental Corporation ("TRC"), "Vibratory Core Sampling Report," February 4, 2002; and,
- "2002 Impacts Analysis Report"—TRC, "Impacts Analysis Report,"[4] February 12, 2002.

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[3] The Marine Geophysical Survey included hydrographic, subbottom profile, side-scan sonar, magnetometer, and acoustic Doppler current profiling. The OSI report presents a discussion of regional geology, Long Island Sound sediment distribution, meteorological conditions, fisheries, and vessel traffic. The survey area from Branford, Connecticut to Wading River, New York included three potential pipeline route options through the Thimble Islands and several modified/alternate pipeline routes. Appendix H of the report includes plan view and profile data of the entire survey area. The three route options through the Thimble Islands converge approximately 6 miles off the Branford mainland ("convergence point") and then follow one route across Long Island Sound. Other than this report and the three route options considered through the Thimble Islands, Islander East offered no further baseline information on any other alternative pipeline routes along the Connecticut shoreline.

[4] The 2002 Impacts Analysis Report discussed "the existing resources within the project corridor, the potential impacts to

Appendix A of DEP R. 7 is the "Marine Pipeline Installation Methodology," February 4, 2002, which contains:

— Concepts for Subsea Containment of Drilling Fluid, and

— Directional Drilling Monitoring and Operation Program.

Several additional reports and amendments were submitted throughout 2002, including:

- DEP R. 38, "Zajac Video Analysis"—Zajac, "Analysis of Video Records of Sea Floor Features Collected by Remotely Operated Vehicle Along the Proposed Islander East Gas Pipeline Corridor in Long Island Sound," August 2002;
- DEP R. 121. Under one cover letter dated September 5, 2002 from Joseph Reinemann (Islander East) to Susan Jacobson (Department), the following documents were submitted:

  — Bohlen,[5] *"On the Erosion and Transport of Sediments Displaced By The Construction of the Islander East Natural Gas Pipeline Across Long Island Sound: A Continuing*

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those resources, and mitigation measures that may be implemented to offset impacts." The overall report included terrestrial/upland, freshwater aquatic and marine/Long Island Sound resource impacts.

[5] Frank Bohlen, Ph.D., a University of Connecticut marine sciences professor, was contracted by Islander East to predict the erosion and transport of sediments associated with the originally proposed trenching methodology that included mounding sediments along the trench. While two initial studies were provided to the Department, Islander East specifically declined to submit Dr. Bohlen's final report to the Department.

Investigation," July 18, 2002;

— Bohlen, *"An Initial Evaluation of Marine Sediment Dispersion Associated with the Installation of the Islander East Natural Gas Pipeline,"* April 8, 2002; and

— Applied Science Associates, Inc. ("ASA"), "Dredged Material Mound Dispersion Analysis Using LTFATE," July 2002.

In correspondence dated March 13, 2003, Islander East withdrew the original WQC and the subject WQC application was submitted. This new application proposed significant modifications to the original application, specifically related to the changes in the installation technology. Between the depths of 13 feet and 20 feet, the originally proposed mounding of native sediment adjacent to an exit pit and trench was eliminated. Instead, Islander East proposed to dispose of the native sediments at an offshore disposal site and the exit pit and trench would be backfilled with an engineered backfill (a non-native course backfill). Additionally, the depth of pipeline cover for the entire pipeline was minimized from 3 feet to 2 feet in an effort to eliminate one barge pass.

The project modifications proposed between the initial SDF/TW/WQC application submittal and the final WQC application proposal resulted in an application file with a patchwork of documents. Some of these documents were no longer relevant to the Islander East proposal by the time the Department made its ruling on the WQC application. Included in this patchwork of documents was the Federal Energy Regulatory Commission ("FERC") Final Environmental Impact Statement ("FEIS") (DEP R. 123)

which was completed in August 2002. While the FEIS provides valuable resource discussions regarding the original proposed construction technology impacts, it does not address the modified installation techniques or impacts associated with such techniques which were proposed in early 2003.

This mosaic of application documents becomes problematic in that Islander East's WQC application relies, in part, upon benthic recovery predictions for installation technologies that are no longer proposed. Specifically, the scientific studies that were cited with the original proposal were based on benthic recovery in areas that were dredged without the engineered backfill. This is very problematic as these studies did not consider the replacement of native substrate with the bank-run gravel engineered backfill that creates an entirely new habitat. Therefore, any studies or opinions provided by Islander East concerning post-dredging studies or recolonization rates of benthic fauna cannot be relied upon when considering the revised installation technology.

Project Proposal

The existing Islander East proposal under consideration by this Department includes three sequential construction methodologies: horizontal directional drilling (HDD), dredging and backfilling with engineered backfill, and plowing. These construction techniques are described in detail in the Pipeline Installation Methodology section of this Decision, below. Where the project enters Long Island Sound at the Connecticut shoreline, the landward-most 3,500 linear feet of pipeline is proposed to be installed in the ground underneath the nearshore waters from Juniper Point utilizing HDD. At the termination of the HDD drill path, an exit pit of approximate di-

mensions 18 feet deep by 130 feet wide by 301 feet long is proposed for excavation. From this exit pit, a dredged trench approximately 5 feet deep by 37 feet wide by 5,851 feet long[6] is proposed to extend to approximately Milepost 12. The exit pit and 5,851 linear foot trench is proposed to be backfilled with bank-run gravel, referred to as "engineered backfill."[7] From Milepost 12 for nine miles to the Connecticut/New York state line, three passes of a sub-sea plow are proposed to: lay the pipe; create a trench 5 feet deep by 25 feet wide at the top of slope and install the pipe; and backfill previously sidecast sediment mounds. Please refer to Appendix A, attached hereto, for a comparison of the original versus the proposed installation technologies.

Existing Site Conditions

The following description of Long Island Sound was provided in TRC's 2002 Impacts Analysis Report at 6:

> "The Long Island Sound is bounded by Connecticut and Westchester County, New York, on the north and by Long Island on the south. The Sound is approximately 113 miles long (east to west) and about 20 miles across (north to south) at its widest point with mid-Sound depths between 60 and 120 feet. Whereas most estuaries

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[6] DEP R. 72 indicates that the trench is 5,851 feet long. Previous application materials indicated the trench was 5520 feet long. Since the purpose of the April 28, 2003 letter (DEP R. 72) was specifically to address impact area, the Department has relied on the accuracy of the 5,851 foot estimate for disturbance calculations discussed later in this Decision.

[7] There are discrepancies in Islander East's application materials regarding the exact composition of the engineered backfill material. Refer to discussion of this in the Engineered Backfill section beginning on page 36 of this document.

> have a single outlet to the sea, the Long Island Sound is unique in that it has two connections with the sea. The Long Island Sound is open through the 'Race' to the east and through the East River and New York Harbor to the west. The Long Island Sound Watershed encompasses approximately 16,000 square miles, and includes the Connecticut, Quinnipiac, Housatonic, Norwalk, and Thames Rivers."

Islander East's proposed pipeline installation across Long Island Sound begins in Branford, Connecticut and heads in a generally southerly direction through the Thimble Islands complex to approximately the New York border in Long Island Sound where it turns southwest to reach shore at Wading River, New York on Long Island (Figure 1). As currently sited, the proposed work corridor will pass through the geological features of the Thimble Islands, a total of 141 islands and exposed rock outcroppings creating a total of 15 miles of coastline[8] within 6.2 linear miles. Many of the larger islands are east of the proposed work corridor but several exposed rock outcroppings are located to the west. This hummocky topography formed of bedrock is found nowhere else in Long Island Sound.

The pipeline is proposed to leave shore in Branford from Juniper Point in a recessed section of shoreline with headlands[9] to both the east, Sachem Head in Guilford, and the west, Indian Neck in Branford. Be-

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[8] Total coastline was measured through use of Geographic Information System by measuring total perimeter of all island features within the town boundary.

[9] A headland is defined as "an extension of land seaward from the general trend of the coast; a promontory, cape, or peninsula."

cause of this recessed location, the pipeline would need to cross a significant expanse of relatively shallow water (< 20 feet deep). Please refer to Figure 2 which highlights the location of the 20 foot depth contour. This water depth is significant because Islander East has identified the 20 foot depth as the minimum depth requirement for the pipe-installation vessels to install the pipe using the less intrusive plow installation technology (FEIS at 3-71).

The Department's major concern with the Islander East proposal specifically relates to the siting of the pipeline in an area which includes an extensive stretch of shallow water, requiring the direct excavation and imported gravel backfill of approximately 5½ acres of shellfish beds. If the pipeline were proposed in a location where depths were sufficient to use a combination of less intrusive installation technologies, Islander East would likely be able to avoid the more disruptive excavation and backfill processes and have fewer impacts on water quality, coastal resources and the water-dependent uses that rely on both.

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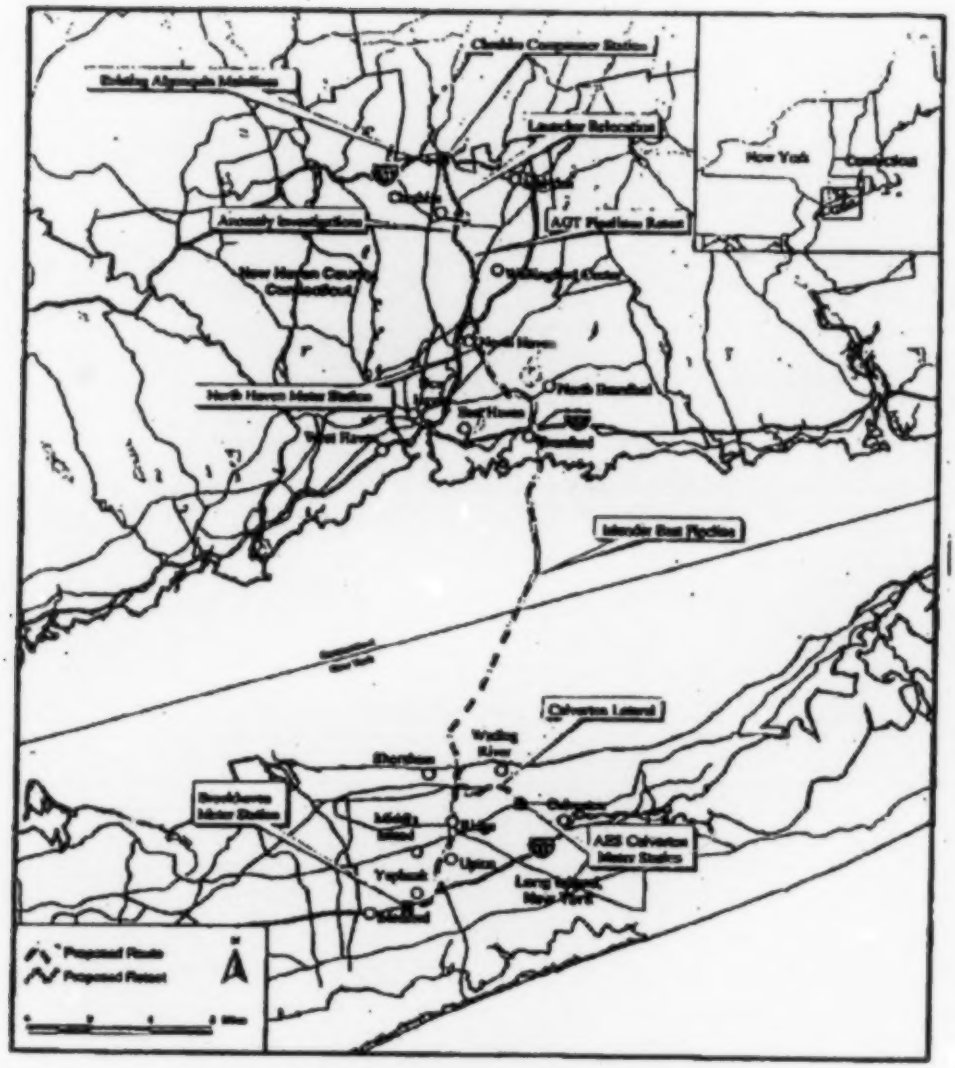

Figure 1. Proposed pipeline route, from FERC FEIS, at 2-2.

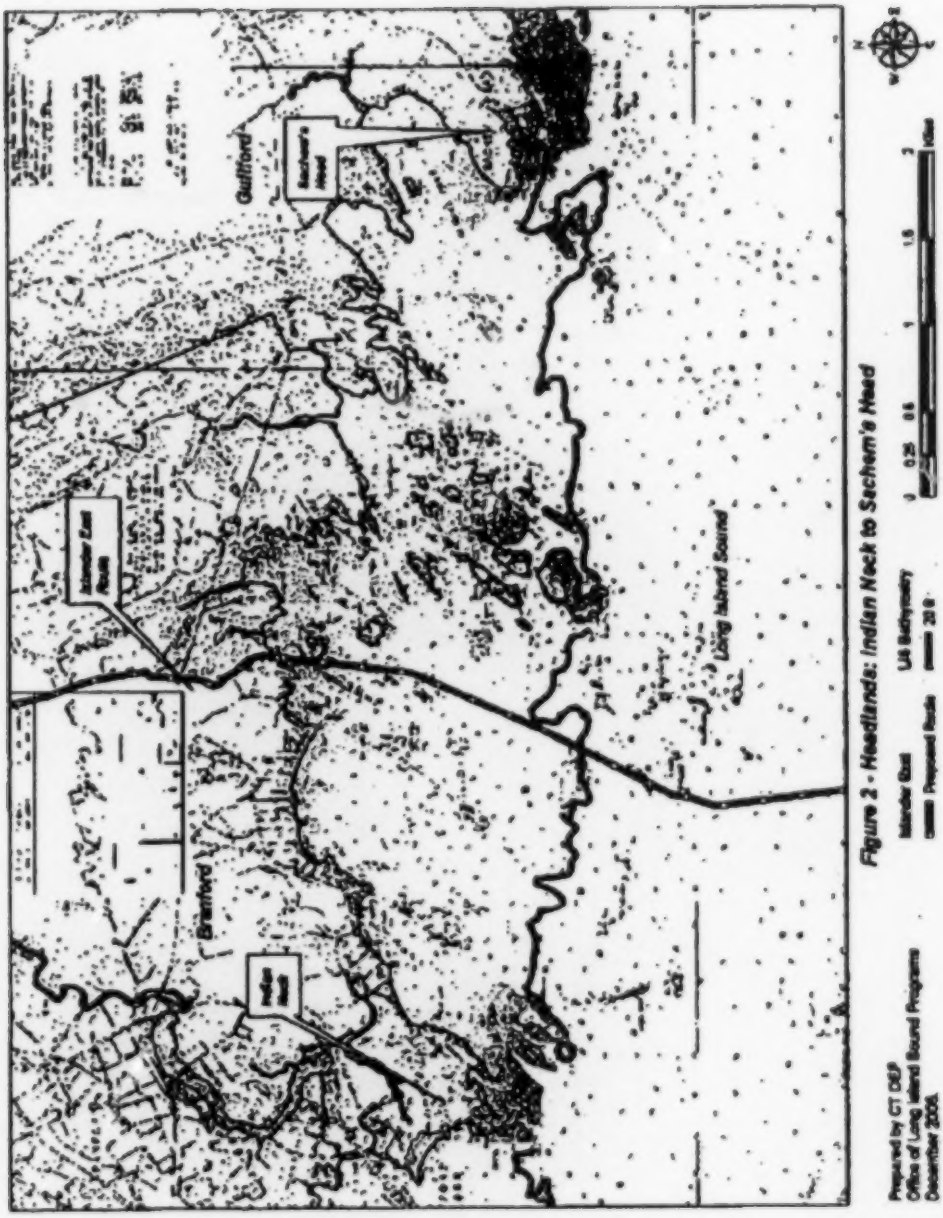

Figure 2 – Headlands: Indian Neck to Sachem's Head

Geology

The unique geology of the Thimble Islands is attributed, in part, to the glacial history of the region. The following discussion was provided in the Marine Geophysical Survey, at 4:

> "The regional geology, especially the surficial sediments for both the onshore and offshore areas of Long Island Sound, is closely tied to the recent glacial history of the area and a marine sea transgression into the present Long Island Sound. From a geologic time perspective, all these events have occurred within a relatively short period, i.e., within the last 20,000 years. A final series of glacial advances approximately 18,000 to 16,000 years before present (BP) transgressed the present day Connecticut and adjacent southeastern New York area. The advance of these glaciers effectively denuded the region of the prior unconsolidated materials leaving the bedrock, composed of Precambrian and Paleozoic schists, granites and gneisses, exposed at the surface. The glaciers moved toward the southwest to the current location of Long Island where the two distinct glacial moraine deposits mark the end of the glacial advances."

As the glaciers receded northward, a freshwater lake was formed in the area that is now Long Island Sound. Thick deposits of layered silt and clay accumulated at the bottom of this lake for approximately 1,000 years. The land that was formerly underneath the mile-thick glaciers began to rise with the relief of the glacier's weight. The rising land caused the lake to drain and the accumulated fine sediments were exposed to air until approximately 13,000 years BP when rising sea levels breached a natural dam near

the Race on Long Island Sound's eastern end and once again, the sediments became submerged.

OSI's Marine Geophysical Survey noted that the seafloor over the vast majority of the project area was gently sloping and uniform with some irregularity in the Thimble Islands area associated with the presence of rock either exposed on the seabed or in the shallow subsurface. Within the Thimble Islands, OSI (at 57) found a profile depicting irregular and abrupt vertical relief over short horizontal distances (at 36). Please refer to Figure 3 which shows a general profile of the central Long Island Sound Basin and the irregularities found along the Connecticut shoreline. The profile view shows the general slope of the underlying bedrock which is shallow to exposed at the Connecticut shore and significantly deeper, under coastal plain sediment, at the Long Island shore. In general, the OSI surveys reflect the Department's understanding of the Thimble Island geology and its unique character when compared to the rest of the pipeline route.

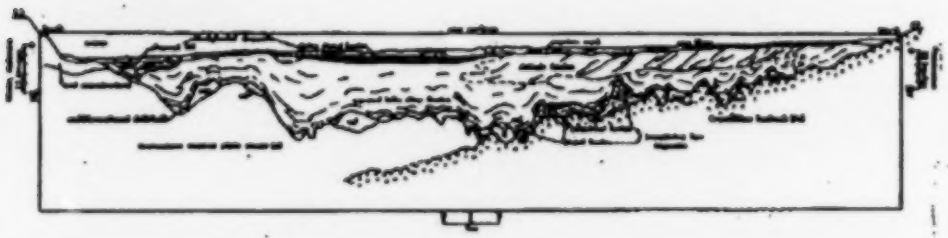

Figure 3. Profile of the central Long Island Sound Basin from Marine Geophysical Survey, at 6.

Soils

The geological processes which created Long Island Sound have produced a thick layer of fine-grained cohesive sediments. Sediment deposition has con-

tinued over the past 13,000 years and the seafloor is generally smooth as a result. In the Marine Geophysical Survey at-57, OSI reports an approximately 10 foot layer of silty clay to cobble size material, referred to as unconsolidated sediment, characterizing the survey area outside of the Thimble Islands. Dr. Bohlen defined the sediments along the proposed pipeline corridor as fine sands, silts and clays with the exception of sands found along the north shore of Long Island (DEP R. 121, April 8, 2002 at 4). Within the Thimbles, the compact layer of silt and clay deposits is interspersed among deposits of glacial till and/or bedrock.[10] In its undisturbed form, the sediment is naturally compressed and is referred to by both Dr. Bohlen and John Roberge, P.E.[11] as being "cohesive" and "plastic."

The OSI Marine Geophysical Survey included the collection of soil samples every one mile along the proposed pipeline route using the vibratory core method. Once collected, the soil data was provided to Haley & Aldrich and TRC for further analysis. In the Haley & Aldrich Soil Test Results, standard engineering tests were conducted and concluded that sediments were fairly homogenous and tended to be plastic and cohesive. Plasticity is a property of the fine-grained portion of a soil that allows it to be de-

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[10] Glacial till is a mix of rocks and finely ground material deposited by melting glacier. Bedrock is generally the solid rock that underlies loose surface material. Most of the Thimble Islands are exposed bedrock.

[11] John Roberge, P.E., of Coastal Engineers, LLC was commissioned by the Town of Branford's Blue Ribbon Committee to evaluate potential sedimentation impacts from pipeline installation. Mr. Roberge is a Stratford, Connecticut-based coastal engineer frequently hired by applicants seeking SDF/TW/WQC permits from the Department.

formed beyond the point of recovery without cracking or changing volume appreciably.[12] A table providing various soil test results for each core sample included a description of the clay's plasticity; fat clay is highly plastic and lean clay is slightly plastic.

A portion of the vibratory core sediment data collected by OSI was sent to TRC for analysis of their chemical constituents. Presented in TRC's Vibratory Core Sampling Report is a description of the sampling and analysis methods, the regulatory criteria used to establish testing parameters and the analytical results of the sediment testing. Sediment sampling plans were designed based upon consultations with both New York and Connecticut state regulatory agencies and the U.S. Army Corps of Engineers ("Corps"). In general, the bulk "sediment chemistry of the sediments proposed for dredging exhibited very low heavy metal concentrations, with pesticides, PAH, and PCB contaminant concentrations being below detection limits" (DEP R. 74).

Currents

A current is generally defined as the horizontal movement of water and it may be either tidal or non-tidal. The overall current flow in Long Island Sound depends on the tide. In the Marine Geophysical Survey at 18, OSI notes that "[tides] in Long Island Sound are semidiurnal (two high tides per day) with little variation in phase or heights across the Sound in the area investigated." In general, currents flow to the west during an in-coming (flood) tide and to the east during an out-going (ebb) tide.[13] The Marine Geo-

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[12] Definition from http://www.tpub.com/content/engineering.

[13] OSI at 20 states, in reference to current speed and direction, that "in areas of constricted water flow significant varia-

physical Survey at 56 notes the "[m]aximum current flow expected in mid-Sound is approximately 0.7-0.8 knots (at a depth of 15 feet)."

Tidal currents are influenced by wind wave induced velocities. The influence of wind wave induced velocities is significant in shallow water. The Marine Geophysical Survey at 21 provides a good introductory discussion of current velocities and the effects of wind waves in shallow waters such as those found around the Thimble Islands:

> "In the central part of Long Island Sound (survey area), where tidally driven currents are lower in velocity than the funnel shaped eastern entrance, wind and wave driven currents may play an increased role in defining the physical processes affecting the seabed. For example, winds of 30 knots (typical of a winter northeaster storm) can produce significant wave heights of 4 to 7 feet and induce bottom current velocities of greater than 0.4 knots. This effect is most pronounced in the shallow areas, and is virtually negligible at water depths greater than 60 feet. As a point of reference, the wave orbital current velocity necessary to re-suspend fine-grained mud is approximately 0.3 knots. Signell, 1997 estimated that the near-bottom current velocities needed to re-suspend fine-grain sediments are reached about 1-10% of the time in the shallower, near shore portions of Long Island Sound."

Measured tidal currents within the nearshore areas are significantly greater than those found in deeper waters because of the wind wave induced velocities.

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tions do exist, especially in and around the Thimble Islands along the Connecticut shoreline."

Dr. Bohlen's initial investigations (DEP R.121) provided valuable insights to the existing process of tidal current, wind and wave impacts on sediment and resuspension in the shallow Thimble Islands region. Survey data collected by Dr. Bohlen and presented in his July 18, 2002 report concur with OSI's observations presented in the Marine Geophysical Survey. Dr. Bohlen found frequent occurrences of waves approximately 3.3 feet in height (1 meter) in the vicinity of the HDD transition basin and dredged trench. He reported that wave height would increase near bottom wave orbital current velocities[14] 0.7 knots (38 centimeters/second) in water depths—30 feet and 1.26 knots (62 centimeters/second) in water depths—15 feet[15] (DEP R. 121, July 18, 2002 at 4).

Natural Sediment Resuspension

The current velocities, soils, smooth topography and shallow water around the Thimble Islands combine to create a significant sediment mobilization and transport factor. Bottom conditions are characterized by high concentrations of suspended sediment that are kept in constant motion. TRC's 2002 Impacts Analysis Report at 28, notes "Bohlen (1993) has shown that sediment transport over much of LIS largely involves the resuspension and deposition of a soft 'fluff layer (a mobile layer of materials just above the sediment-water interface referred to as the nephloide layer), but patterns varied among basins." The Impact Analysis Report also noted that in the

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[14] An orbital current is the circular motion imparted to the water column by a passing wave.

[15] Existing depths in the vicinity of the HDD exit point (MP10.9) are 12 to 15 feet and 22 to 25 feet at the southern end of the trench (MP 12).

vicinity of the proposed work area, "the amount of suspended material ranged from 5-10 mg/L with amounts increasing somewhat with increasing water velocity." In DEP R. 121, April 8, 2002 at 6, Dr. Bohlen reports that in the proposed work area, it is only the top 10 millimeters of the sediment surface that is being constantly resuspended in the high-energy environment. Bohlen found that the sediments deeper than 10 millimeters were uniformly fine-grained and cohesive (a clump of cohesive sediment tends to stick together rather than separate into individual sediment particles) with a relatively low water content and a high bulk density. These dense, cohesive, in-situ deposits resist erosion and are not prone to resuspension as are the top 10 millimeters.

The FEIS at 3-49 notes: "[a] study by Signell et. al, 2001 describing the physical conditions in the Long Island Sound that affect sediment suspension notes that fine sediments along coastal margins are regularly resuspended by tidal currents, that storm related events occur between 10-20 times per year that can redistribute fine sediment to depths of 20 meters, but in depths greater than 20 meters, the frequency of wind or tidal driven currents with velocities to resuspend fine sediment is infrequent." For the most part, the Department concurs with statements in the record regarding the frequency of storm events and the associated sedimentation.

Ecology

The shallow waters off Juniper Point in Branford give rise to the numerous Thimble Islands which provide sensitive and critical habitats (Bottom Characterization Survey at 2). The area is generally recognized as important colonial waterbird nesting habi-

tat,[16] a waterfowl wintering area,[17] and one of only four primary seal haul-out areas in the State of Connecticut.[18] This area has been recognized by the United States Fish and Wildlife Service as a significant habitat complex in need of protection and has been incorporated into a larger New Haven Harbor Complex in the *Northeast Coastal Areas Study: Significant Coastal Habitats of Southern New England and Portions of Long Island, New York.*[19] Significant and unique areas called out in this report specifically include bird rookeries on the Thimble Islands and abundant shellfish beds in the nearshore areas.

Both the original Islander East application (DEP R. 7) and the FERC FEIS (DEP R. 123) contain descriptions of the fisheries resources and the essential fish habitat found within the proposed pipeline corridor.[20] DEP R. 7 contains numerous studies and inven-

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[16] DEP R. 94 at 3.

[17] DEP R. 94 at 3.

[18] DEP R. 94 at 3.

[19] Appendix C of DEP R. 94.

[20] The following list of marine species was copied from Table 3.4.1-2 in the FEIS entitled "Recreational or Commercial Important Fish Species Known to Occur In the Project Area."

Butterfish	Pollock	Sand Eel
Summer Flounder	Red Hake	Sand Lance
Silver Hake	Windowpane	American Lobster
Weakfish	Stripped Bass	Crab
Winter Flounder	Sturgeon	Oyster
Scup	Tautog	Clam
Black Sea Bass	Cunner	Conch
Bluefish	Sandbar Shark	Scallop
Atlantic Mackerel	Sand Tiger Shark	Squid

Several clarifications and corrections should be made to this list. Species that should be added include: Little skate, Atlantic

tories of the existing benthic communities found within the Thimble Islands in the vicinity of the proposed pipeline corridor. Most notably, Peter E. Pellegrino, Ph.D. and Roman Zajac, Ph.D. describe the various bottom habitats along the proposed pipeline corridor and the species found within these distinct habitats. Dr. Pellegrino was commissioned by Islander East to conduct two ecological surveys and Dr. Zajac was hired to conduct a video survey of the proposed pipeline route using a remotely operated vehicle ("ROV").

Dr. Pellegrino's Bottom Characterization Survey, at 2, delineated "the location and nature of sensitive habitats in the vicinity of the pipeline route within Long Island Sound." This survey focused on the nearshore and subtidal environments off Juniper Point in the Thimble Islands. One may reasonably infer from Dr. Pellegrino's study description that the only sensitive habitats along the pipeline route are in the Thimble Islands. Dr. Pellegrino surveyed 17 subtidal stations and 15 nearshore stations[21] in this region

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herring, Atlantic menhaden, American shad, Horseshoe crab, and Hickory shad. "Crab" may refer to Blue, Green, and most likely Asian Shore crabs. Sand lance and Sand eel are both common names for one species, the American sand lance. The lance should not be on this list because it is not targeted by any fishery. The FEIS list does not specify what type of sturgeon, but it should not be on the list; both Atlantic and Shortnose sturgeon harvesting is prohibited as both species are protected. Species that are infrequent and not considered recreationally or commercially important in the project area include: canner, sand bar shark, sand tiger shark, Atlantic mackerel, scallops and pollock. Additionally, stripped bass should be striped bass.

[21] Page 3 of the report indicates 25 nearshore stations were sampled. This number appears to be an error as only 15 stations are described in the survey and presented in Table 3.

and described the sediment and the invertebrate species found within a $0.5m^2$ grid. The subtidal (always underwater) stations are described as being generally dominated by silt/clay to sandy/silt soft sediment. Four of the stations were selected for their proximity to rocky bedrock outcrops and the remaining sites were located within shellfish lease areas. The nearshore sites (both subtidal and intertidal/exposed at low water) were located between Lewis Island and Brown Point. Two of the stations were noted for the growth of tidal wetlands and one station contained intertidal flats. Dr. Pellegrino noted that both of these habitats are critical and sensitive ones. Both the subtidal and nearshore stations contained a variety of habitats and invertebrate species ranging from silt/clay soft mud with only worms to silty-sand and exposed rock with barnacles, mussels, oysters, snails, crabs and worms.

The purpose of Dr. Pellegrino's Community Structure Survey, at 1.0, was "to document existing benthic community structure and to provide a benthic baseline against which future changes may be detected." Included in this baseline survey was a brief literature review citing some of the major benthic inventories conducted in Long Island Sound. Dr. Pellegrino's methodology included taking four benthic samples from each of 12 locations along the pipeline route. The samples were taken in both Connecticut and New York waters by OSI during the Marine Geophysical Survey and delivered to Dr. Pellegrino for analysis. Six of the twelve sample locations were within the Thimble Islands area. In general, those samples with the highest species richness and community density were located within this area. He reports that the "assemblages found associated with the proposed gas pipeline route are typical of most

soft sediment habitats in central and western LIS." It is important to note that nowhere in either of his two surveys prepared for Islander East does Dr. Pellegrino attempt to predict the recovery rates of macrobenthic communities following pipeline installation.

Dr. Zajac provided an analysis of seafloor video tapes taken by a ROV (DEP R. 38). The video tapes, taken by OSI in the spring of 2002, were forwarded to and interpreted by Dr. Zajac to provide a better understanding of the "ecological characteristics of the benthic habitats and communities along the proposed pipeline corridor" (DEP R. 38 at 1). The first video survey line spanned Long Island Sound from the horizontal directional drilling exit point near the Connecticut shore across to Long Island. Ten east-to-west lines were run perpendicular to the first survey line near the Connecticut shoreline and 8 east-to-west lines were run near the New York shoreline. These perpendicular lines were approximately 3,000 feet in length to capture the area closest to the pipeline location which would be directly affected.

The results of Dr. Zajac's video analysis corroborated the earlier reports of benthic communities provided by Dr. Pellegrino and the soil characteristics found by both OSI as reported in the Marine Geophysical Survey and in Haley & Aldrich's Soil Test Results. The Connecticut nearshore area was described by Dr. Zajac as a "heterogeneous, but primarily mud bottom." Please refer to Figure 4 for a chart summarizing the diverse habitat types found along the Connecticut shore in the predominantly soft sediments. For comparison of the sea features found along the rest of the proposed corridor, see Figures 5 and 6. Figure 4 shows that the "most numerous features found along the CT lateral survey lines were

pits, mounds and burrows (P, M, B), tracks and tubes." These relatively shallow features in the mud are created by organisms such as lobsters, crabs and fish. The high occurrences of vents[22] noted by Dr. Zajac are the product of bivalves *(i.e.,* clams, *etc.)* and other burrowing fauna. In his analysis, Dr. Zajac does not offer a recovery rate estimation for macrobenthic communities following pipeline installation.

In general, these surveys are a valuable aid in documenting the existing conditions in Long Island Sound and in providing a baseline against which future changes caused by pipeline installation can be monitored. None of the Pellegrino or Zajac reports cited in this section, however, made any benthic recovery rate predictions and were based on the previous application proposal (dredging with replacement of native sediment) and not on the current application proposal (dredging with placement of engineered backfill).[23]

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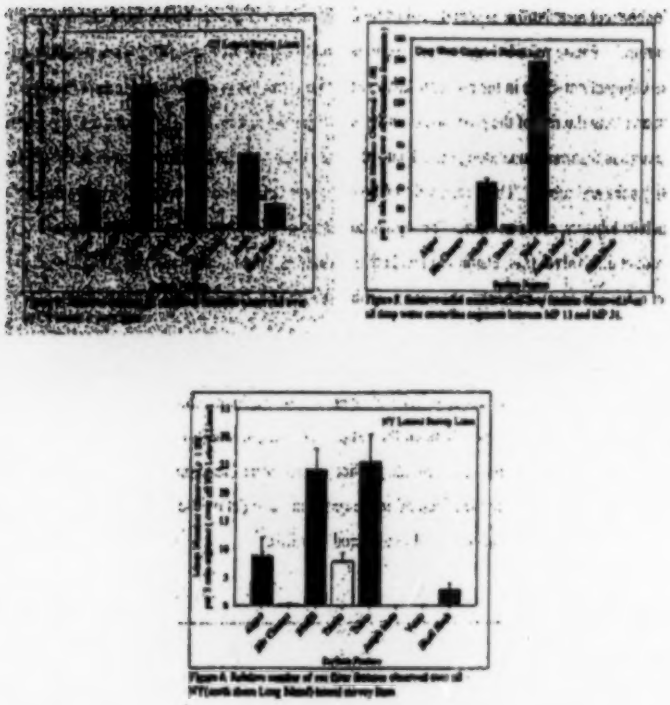
[22] A vent is a hole/tunnel at the substrate surface caused by the expulsion of water and/or waste from burrowing organisms.

[23] The only possible statement made by Dr. Zajac that could be credited with making a prediction is in DEP R. 60, TRC report, at 5, where Dr. Zajac discusses the potential impacts of sedimentation on the benthic community adjacent to the project. This impact assessment cannot be considered a complete as habitat recovery within the project corridor was not considered. (See Appendix J, attached hereto, for Dr. Zajac's complete memo.)



Figures 4, 5 and 6 from Zajac Video Analysis, at 42, 43 and 45.

The FEIS compiled the survey information from the Zajac and PeRegrind reports and presented a list of the substrate, locations, and benthic macrofauna in Table 3.4.1-1 (Figure 7) as follows:

TABLE 3.4.1-1

Characteristics of Benthic Habitats Along the Islander East Marine Crossing

Substrate	Locations	Benthic Macrofauna*
INTERTIDAL		
Intertidal Flats	MP 10.2, Branford, Connecticut	Clams, oysters, snails, worms
Rocky	MP 10.2; Branford, Connecticut	Abundant macro algae, oysters, barnacles, mussels, snails
Tidal Wetlands	MP 10.2, Branford, Connecticut	Amphipods, snails, crabs, and shellfish
Sandy	MPs 32.8, Shoreham, New York	Surf clams, worms, gem shells
NEARSHORE		
Rocky	MPs 10.2 to 12.5, Connecticut	Abundant macro algae, mussels, sea stars, sponges
Soft Sediment with abundant shellhash	MPs 10.2 to 12.5, Connecticut	Clams, oysters, lobster burrows, crabs, and various worms
Sandy	MPs 32.1 to 32.8, Shoreham, New York	Surf clams, gem shells, and worms
OFFSHORE		
Soft Sediment	MPs 12.5 to 32.1, Long Island Sound	Low-to-high diversity, dominated by mid to late stage successional communities, polychaets dominated, bivalves and gastropods relatively abundant

* This list is not intended to be comprehensive.

Figure 7. Benthic habitat table from FEIS, at 3-56.

Water Quality

As discussed above, the Thimble Islands are located in Long Island Sound's Central Basin. Overall, chemical and bacteriological water quality conditions in the Thimble Islands region are consistently excellent. Long-term water quality monitoring initiated in 1991 by the Department as part of the Long Island Sound Study[24] shows that only rarely are these waters

[24] Initiated in 1985, the Long Island Sound Study (LISS) is a partnership of federal, state, and local governments agencies,

subjected to the impacts of low dissolved oxygen conditions that generally develop each summer in areas farther to the west in Long Island Sound.[25] In general, this area meets the Long Island Sound Study interim management goal for bottom water dissolved oxygen, usually with dissolved oxygen concentrations that are excellent and fully supportive of marine life.

Water Quality Classifications

Section 303 of the amendments to the Act (33 U.S.C. §1333) requires that states adopt surface water quality standards. These state water quality standards are submitted to, and must be approved by, the Administrator of the U. S. Environmental Protection Agency ("EPA"). Connecticut's most recent water quality standards were adopted effective December 17, 2002. State water quality standards provide the basis for water quality management decision-making by the Department and are a critical component in the state's efforts to achieve the fundamental goal established in the Act of protecting and maintaining the physical, chemical, and biological integrity of the nation's waters. At a minimum, the standards must be sufficient also to meet the interim goals of the Act for achieving water quality conditions that allow for protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water.

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private organizations and citizens formed to develop and imple-
ment a comprehensive conservation and management plan for Long Island Sound. Funding support for the LISS is provided by the Environmental Protection Agency through the National Estuary Program and by the States of Connecticut and New York.

[25] See Appendix B of DEP R. 112 for a summary of monitoring program and a sample of survey results.

As required by the Act, Connecticut's Water Quality Standards include:

- beneficial designated uses for each waterbody *(e.g.,* habitat for marine fish and aquatic life, shellfish harvesting for direct human consumption, navigation, *etc.)* that are assigned on the basis of the waterbody's classification;
- narrative and/or numeric water quality criteria that must be met to support each designated use; and
- policy statements including an anti-degradation policy and implementation procedures designed to maintain and protect water quality in high quality waters, and protect and maintain existing uses in all cases.[26]

These elements do not stand alone, but must be read in such a fashion as to be internally consistent within the Water Quality Standards and consistent with the goals of the Act.

The resulting water quality classifications for the Thimble Islands region are SB/SA and SA. The SB/SA Classification signifies that the water quality management goal is to achieve full support of all Class SA designated uses. Class SA waters are designated for habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation.[27] A Class SA designation is the high-

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[26] See Appendix A of DEP R. 112 for State of Connecticut, Department of Environmental Protection, Water Quality Standards.

[27] Please refer to Appendix A of DEP R. 112 (Water Quality Standards, pages 15-17) for a more complete description of these classifications and designated uses.

est that can be achieved. Please refer to Figure 8 for a water quality classification map of the Thimble Islands region.

Figure 8. Water Quality Classifications from DEP R. 112, Appendix C.

Existing Uses

Waters of the Thimble Islands region support recreational and commercial boating and fishing, sightseeing tours and unique wildlife observation opportunities such as seal watching. In 2004, the Thimble Islands region supported 3 full-time commercial lobstermen and 14 licensed shellfishermen as well as numerous recreational fishermen.[28] Historically, the area supported as many as 5 commercial lobstermen with 15 other part-time lobstermen also fishing the area at one time or another. The existing use most

[28] DEP R. 94, at 3.

relevant to this Decision is that of commercial shellfishing. Commercially valuable shellfish found in the area of the proposed pipeline route include eastern oyster (*Crassostrea virginica*), hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), blue mussels *(Mytilus edulis),* and channel whelk (*Busycon canaliculatum*). The Department's primary concern with pipeline installation at the proposed location is the impact to oyster and hard clam cultivation and harvesting.

Long Island Sound in general and the Thimble Islands area in particular supports an economically-significant and long-established shellfishing industry. Connecticut's nationally-recognized shellfish industry produces the highest quality oysters in the United States. In 2001, Connecticut ranked first and second, respectively, for the production of hard clams and oysters along the East Coast of the United States despite a devastating blow to oyster production from MSX[29] in 1997 (DEP R. 112, at 3).

Through routine interaction and consultation with the Connecticut Department of Agriculture Bureau of Aquaculture ("DA/BA") on regulated activities, the Department has developed an expertise in understanding both cultivation and harvesting methods. Also, this expertise is derived through direct regulation of certain types of aquaculture activities. Significant preparation and work goes into shellfish cultivation and harvesting. Just as farmers seed and plant their fields, shellfishermen prepare and stock

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[29] MSX (multinucleated sphere unknown) is a single-cell parasite that invades the oyster's soft body, grows and divides within the tissue, and eventually overwhelms the normal metabolic processes in the shellfish resulting in death.

their beds with juvenile seed shellfish. In general, the waters of Connecticut contain shellfish seed beds, grow-out beds and depuration[30] beds. Seed beds are most often naturally productive areas where the water depth, temperature and currents promote natural shellfish production. The juvenile shellfish is taken from a seed bed by the shellfisherman to a grow-out bed where the shellfish will filter nutrient rich waters and grow quickly. These "Shellfish Growing Areas" are designated by DA/BA in accordance with the National Shellfish Sanitation Program to meet the requirements of the United States Food and Drug Administration. Once the shellfish reach market size, they are taken from the grow-out beds to depuration beds where they spend from two weeks to six months, depending on the water quality designation of the area from which they are coming. In the depuration beds, impurities pass through the shellfish's system. Depuration beds are "Conditionally Approved" or "Approved." Refer to the Shellfish Area Classification map of the Thimbles region, in Appendix D of DEP R. 112.[31] In the vicinity of the Thimble Islands, the pipeline is proposed primarily through "Approved" shellfishing areas.

This combination of exceptional water quality and existing habitats around the Thimble Islands is such that the grow-out beds and the depuration beds are actually one and the same, thus, eliminating an en-

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[30] Depuration is defined in www.shellfishquality.ca/glossary.htm as the "process of using a controlled, aquatic environment to reduce the level of bacteria and viruses in live shellfish."

[31] A more detailed description of the specific parameters and required criteria relating to authorization for direct harvest of shellfish is referenced in the Water Quality Standards (Appendix A of DEP R. 112) at 17.

tire harvesting stage for the shellfisherman. The DA/BA "Approved" designation, which is the most stringent and, therefore, the most difficult to achieve, recognizes that the water is of sufficiently high quality to allow for direct human consumption of shellfish without the requirement for relocation and depuration of the shellfish. Although many of Connecticut's marine waters are classified SA or SB/SA, the designated areas where suitable habitat exists and monitoring data documents the exceptionally good. water quality necessary to receive an "Approved" designation by DA/BA are, in fact, quite limited. In general, the waters off Branford support approximately 46% of shellfishing areas approved for direct harvest in eastern Connecticut.[32] Islander East's consultants recognize the importance of water quality to sheflfishing: regarding the anthropogenic input of contaminants into surface waters, TRC, at 9 in the 2002 Impacts Analysis Report, notes that the "project area is distant enough from potential source areas that levels are low, as evidenced by the presence of oyster leases that are used for depuration."

As previously mentioned, a significant amount of work goes into commercial shellfish harvesting. In order to seed a bed, both oyster and clam seed may be purchased from commercial hatcheries or they may be harvested from existing seed beds. A usable oyster seed bed depends upon the availability of an even topography and hard substrate.[33] Released by the millions, the oyster eggs become fertilized in the water column and develop into free-floating larvae. As the

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[32] DEP R. 112, at 3.

[33] Naturally occurring oysters are found in hard substrate anywhere from the intertidal area to depths of approximately 35 feet, while commercial oysters are grown in depths to 50 feet.

developing larvae settle out of the water column they attach themselves only to hard substrate which is free of silt. These "spat" often settle on cultch which is crushed shell. The seafood industry produces large volumes of cultch, which is in high demand as it is reused by shellfishermen and planted on the seed beds. The cultch is used to improve seed bed quality by providing hard surface for spat. The spat-covered cultch is harvested from the seed beds with an oyster dredge[34] and brought to the grow-out beds. The spat are then broadcast off the vessel to settle in the grow-out beds. Once the oysters are grown-out and harvested, the shellfishermen collect the remaining shell or cultch from the grow-out bed, place it in an upland location so that algal growth will dry (thus keeping the hard surface clean), and then place the cultch back into seed beds prior to the next spring season.

Clam harvesting is different than oyster harvesting because clams burrow into the sediment rather than remaining on the surface attached to hard substrate. To harvest young clams, a clam dredge is used. The dredge has 1 inch openings to allow all clams smaller than 1 inch to pass through.[35] These smallest clams are left in the seed bed to be harvested in subsequent years. A typical clam dredge used in Long Island Sound consists of a steel sled with a basket that typically weighs no more than four hundred pounds. Like the oyster dredges, the clam dredges are also towed by a vessel. Seawater is pumped down a hose at low

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[34] Oyster dredges are approximately 30 inches by 60 inches and weigh 30 to 300 pounds. The teeth are 2½ inches long and are at a 90 degree angle to the frame. The dredges are towed along by a boat with the 2½ inch teeth skimming the substrate surface at the bottom.

[35] If clams smaller than 1 inch are sought, an appropriately sized wire mesh may be placed over the basket.

pressure to a manifold on the front of the sled where it is directed through nozzles into the seafloor to loosen the softer sediments into which clams burrow. Teeth, up to two inches long, extend below the runners and steer the clams into the basket. Nozzles located in the basket clean off the clams. Critical to a successful tow is achieving the proper balance between the depth of the teeth into the substrate, the manifold angle, appropriate water pressure for the type of bottom, boat speed, line length and current flow.

The record leaves no doubt that the nearshore area through which the pipeline is proposed is a productive and important shellfishing area. DEP R. 116 is a map entitled "Town of Branford Privately Owned Shellfish Beds" showing that the proposed pipeline corridor traverses directly through these beds. DEP R. 117 is the Town of Branford's recently completed (2003) division of the recreational shellfish area into approximately 20-acre plots for commercial lease.[36]

Islander East's consultants have consistently acknowledged that the Thimble Islands area maintains extensive and productive shellfish beds. TRC notes "[s]hellfish of commercial importance inhabit nearshore Connecticut waters traversed by the proposed project including species such as American lobster, blue crab, clams, and oysters."[37] TRC further states that "Town of Branford shellfish lease areas are lo-

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[36] The Town of Branford first initiated commercialization of the recreational bed area in 1998 after receiving complaints that commercial shellfisherman were using the recreational beds. At a Representative Town Meeting in 1998, a 6 month moratorium was initiated while the Town began the process of commercializing the shell fishing grounds.

[37] Impact Analysis Report, 2002 at 8 and 19.

cated in the area traversed by the HDD installation, town recreation shellfish area are located in the dredge section of the route and state leases are in areas of dredging and plowing."[38] TRC's observations were completely consistent with these comments: "[s]ide scan surveys show that the sea floor is relatively featureless to about MP12, and that just past MP12, there are extensive trawl marks throughout the corridor and adjoining areas of sea floor." The trawl marks are minor marks upon the seafloor attributed to shellfish harvesting.

In the Marine Geophysical Survey, OSI comments that "[o]yster lease areas are abundant throughout the inner shelf region of the southern Connecticut shoreline" (at 17). Also, "[a]long various sections of the proposed pipeline route corridor, the side scan sonar identified continuous and semi-continuous linear features on the seabed. These features appear to be drag marks left by anchors or by fishing activity in the area. Features interpreted as drag marks were most commonly observed along the Connecticut shoreline, shoreward of the route convergence point" (at 58).

While describing the sea floor features along the proposed pipeline route, it was noted in the Zajac Video Analysis that several of the survey lines contained tracks that "were large and appeared manmade, coinciding with trawl marks that were found in the previously conducted side scan sonar" (at 42).

In Dr. Pellegrino's Bottom Characterization Survey at 8, Dr. Pellegrino states: "Station 9 was located in leased shellfish lot #170 adjacent to Roger's Island. The bottom type was soft mud (silt/clay) with moder-

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[38] Impact Analysis Report, 2002.

ate amounts of *Mulinia* shell hash. Although no live clams were recovered the substrate at this station should still be considered potential hard clam habitat."

Because the State's water quality standards require the Department to take into account existing designated uses of its waters, the Department must differentiate those impacts associated with an existing water dependent use such as shellfish harvesting, from those impacts associated with pipeline installation which is neither an existing nor designated use. Shellfish harvesting generally involves a disturbance of only the top 2 inches to 3 inches of Substrate. As will be explained in the following Pipeline Installation Methodology and Direct Bottom Disturbance sections of this Decision, pipeline installation operations will require sediment disturbance from 5 feet to 18 feet deep. More importantly, the installation impacts will prevent the shellfish beds from being harvested for an unknown, but prolonged, period amount of time.[39]

Pipeline Installation Methodology

The Long Island Sound crossing of the Islander East pipeline would use three separate technologies, each with its own set of associated impacts upon the marine environment. Starting from the Connecticut shore, the pipeline would begin at Juniper Point in Branford using a construction methodology known as horizontal directional drilling ("HDD").[40] An HDD exit pit would be excavated several thousand feet offshore to mark the transition of the pipeline from a

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[39] Refer to discussion in Shellfish Harvesting Section.

[40] HDD enables subsurface installation of linear projects such as cables and pipelines by creating a drill path underneath geological or anthropogenic features.

deep underground burial (> 80 feet) to a shallow surface burial (approximately 18 inches). From the exit pit, a one-mile long trench would be excavated until the project reached the 20 foot bathymetric contour where a plow would be used for pipeline installation in deeper waters past the New York state line. Figure 9 (from DEP R. 73) provides a schematic summary of the installation sections. Appendix B, attached hereto, contains the most recent maps of the pipeline route provided by Islander East (from DEP R. 73 and 93).

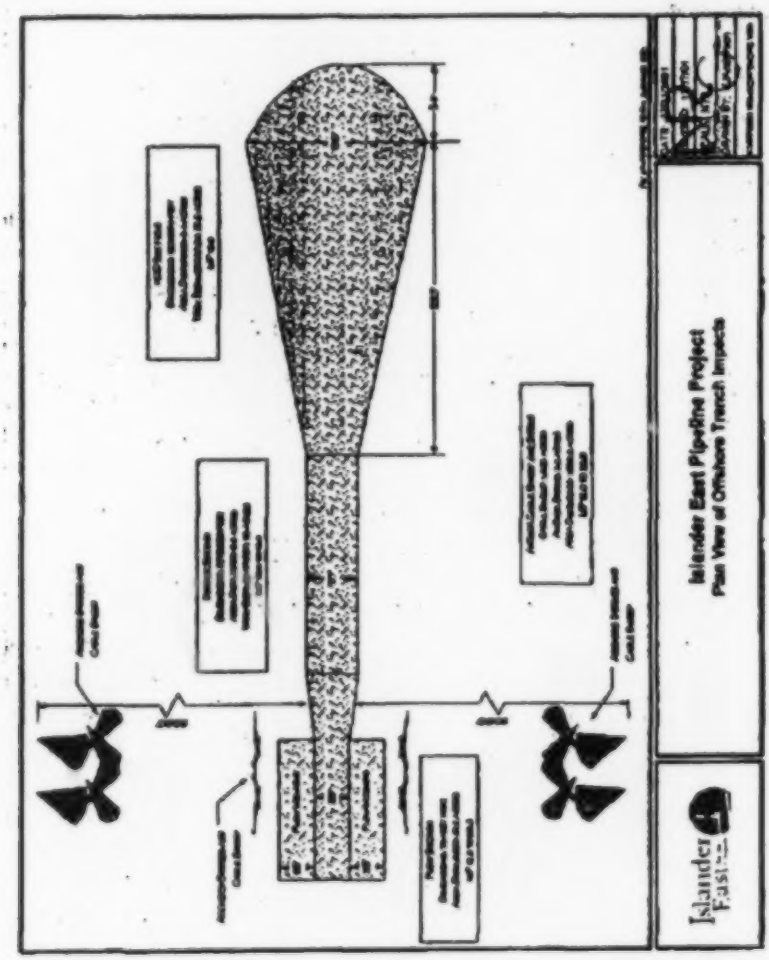

Figure 9. Installation sections from DEP R.73.

HDD Segment

An understanding of the HDD construction process, including its requirements and limitations, is essential in order to evaluate the potential adverse impacts associated with this type of construction methodology. As currently proposed by Islander East, the HDD staging area would be located at the upland site of Tilcon Connecticut, Inc., an industrial supplier of crushed stone, hot mix asphalt and ready mix concrete. Tilcon's Branford marine terminal is a crushed stone transfer facility where the stone is loaded on barges for distribution throughout the northeast.[41] The FEIS summarizes the HDD methodology as follows:

> "The process would involve drilling a hole from a point on the mainland (entry side) to a point on the seafloor (exit side) and installing a prefabricated segment of pipe through the hole. Islander East estimates that the borehole would be at least 80 feet and up to 120 feet below the sea floor at the Tilcon Channel Crossing. The segment of pipe would be fabricated on a lay barge near the exit hole in Long Island Sound. After the hole is drilled, the pipeline segment would be attached to the drill string on the exit side of the hole and pulled back through the drill hole toward the drill rig. Islander East has submitted a 'Directional Drilling Monitoring and Operations Program for Natural Gas Pipeline Installation in Long Island Sound for Islander East Pipeline Co., L.L.C.' which describes several conceptual techniques for containing and capturing a

[41] This particular water-dependent use has been in existence at this site since at least 1914.

> postion [sic] of the drilling fluid to be utilized during the HDD process in Connecticut. These measures would generally apply to the reaming passes associated with the HDD. Control of the fluid during the pilot hole and pullback passes would be limited to collection of the fluid within the excavation at the exit hole."[42]

More explicitly, once equipment is staged on the upland, a small diameter drill is used to create a pilot hole that will drill between 80 feet and 120 feet below the surface. The pilot hole eventually becomes the pipeline path underground. A magnetic steering tool directs the drill to its final destination. When the pilot hole is completed, the drill punctures the sea-floor and drilling fluid will be released. The sequencing of the pilot hole completion and the exit pit excavation is not clear as the record provides conflicting information. The FEIS, at 3-53, states the exit pit "would be excavated immediately after the emergence of the drill head." The FEIS also states, as cited above, "[c]ontrol of the fluid during the pilot hole and pullback passes would be limited to collection of the fluid within the excavation at the exit hole." In order for the drilling fluid from the pilot hole to be captured in the exit pit, the pit would already need to be in place.

The use of drilling fluids is an integral component of any HDD project. According to the Directional Drilling Monitoring and Operations Program in Appendix A of DEP R. 7, Islander East proposes to use a drilling fluid consisting of bentonite and water. Bentonite is a sedimentary rock formed largely from the clay mineral montmorillonite and maintains a clay-like consistency. Bentonite alone does not ex-

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[42] Section 2.3.4.1 at 2-36, DEP R. 123.

hibit a toxic capacity. According to the Marine Pipeline Installation Methodology, bentonite is often enhanced by the addition of polymers to increase yield. By letters dated September 5, 2002 (DEP R. 37) and September 12, 2002 (DEP R. 39), Islander East provided information on potential additives that may be considered during drilling operations but failed to identify which of 39 potential bentonite products and additives would be utilized.[43] The drilling fluids function to lubricate the bit and drill pipe; stabilize the hole; carry the cuttings away from the drill bit; and, eventually, reduce friction on the pipeline as it is later pulled back through the borehole (FEIS at 3-52). The drilling fluid is continuously circulated from the borehole to a pool/tank at the upland staging area where it is filtered and processed for reuse. The drilling fluid is circulated in the borehole under high pressure.

Appendix B of the Marine Pipeline Installation Methodology (DEP R. 7) is a document on "Concepts For Subsea Containment of Drilling Fluid." Two potential methods of recovering the drilling fluid are discussed at 1-1 and 1-2. The applicant proposes to defer a final decision and development of the system until after an HDD contractor has been selected. The two methods discussed would potentially require setups including mooring systems, conductor pipes and "goal posts" or sheetpilings, tieback pilings/land-anchors and mooring piles. Regarding this facet

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[43] There is a contradiction in the record at 3-53 in the FEIS: "[t]he drilling fluids would consist of bentonite clay native rock cutting, and freshwater with no additives". While the FEIS reports that no additives will be used, Islander East has indicated that additives will be used as necessary based on conditions encountered during the drill.

of the proposal, Islander East's application is vague and largely inadequate. Accordingly, Islander East's materials fail to demonstrate that there will not be any environmental impacts associated with these conceptual containment systems. Considering the scope and nature of the possible recovery proposals, there is reason to be concerned about potential environmental impacts and our ability to determine consistency with the WQS.

An HDD exit pit will be excavated at the pilot hole termination. The FEIS recommends that the pilot hole be successfully completed prior to creation of the exit pit.[44] The proposed HDD exit pit, approximately 18 feet deep by 130 feet wide by 301 feet long, would be excavated 3,400 feet from shore and would be located in Town of Branford shellfish beds[45] in water approximately 13 feet deep.[46] An exit pit of this size, approximately a football field, would require the excavation and off-site disposal of approximately 5,300 cubic yards of sediment. During excavation, a barge-

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[44] As mentioned earlier, there is a contradiction in the record regarding when the exit pit will be excavated.

[45] The Haley & Aldrich "Report on Laboratory Soil Test Results Natural Gas Pipeline Crossing Long Island Sound Branford, Connecticut to Wading River, New York" misidentifies the exit pit as being in "Oyster Lease" #171 (Attachment F in DEP R. 7).

[46] The "Directional Drilling Monitoring and Operations Program For Natural Gas Pipeline Installation in Long Island Sound for Islander East Pipeline Co., LLC"(Appendix A in DEP R. 7) states: "The pipeline will be installed using directional drilling techniques on the Connecticut side in the near shore environment (out to water a depth of 20+/-) to minimize potential impacts in the intertidal and near shore zones." This statement is obviously inaccurate as a one mile trench with backfill has been proposed to reach the 20 foot bathymetric contour.

mounted crane would be held in place with several spuds, which are giant poles driven into the substrate to perform as anchors (see photo in Appendix C, attached hereto). Once the pilot hole is successfully completed and the exit pit is constructed, work vessels at the exit pit refit the drill head with larger drill bits and these are back-reamed through the pilot hole until a 36-inch diameter hole is achieved. While this back-reaming process is underway, Islander East proposes to leave a 4,000 foot section of prepared pipe, called a "pullback string," upon the seafloor. Once the hole is completed, the pullback string would be pulled into the exit hole towards the upland staging area. This pipe section would be tested for damage and the exit pit would be backfilled. Please refer to Appendix C, attached here-to, which contains schematics and photos related to this segment of pipeline installation.

Dredge Trench Segment

From the HDD exit pit, Islander East has proposed to dredge an approximately one-mile long trench to Milepost 12. Islander East has proposed that the trench would be 5 feet deep by 7 feet wide by 5,851 feet long and require the excavation of between 14,000 and 23,000 cubic yards of sediment, depending on the angle of the trench side slopes. Please refer to Figure 10. According to DEP R. at 93, the side slope angle would not be determined until the actual dredging is being conducted: "The actual angle of repose will be determined by site specific conditions at the time of construction, which includes weather and tidal influences." For the purpose of application review, that leaves the total dredge volume (including the HDD exit pit) between 19,300 and 28,300 cubic yards. Islander East has provided conflicting in-

formation as to the fate of the dredge material, including the material to be dredged from the HDD exit pit. It appears that a majority of the sediment would be placed on barges for open water disposal at one of the Long Island Sound dredge sites; however, in correspondence dated July 29, 2003 (DEP R. 93), Islander East suggests that they may return a portion of this material as backfill to cover the pipe.

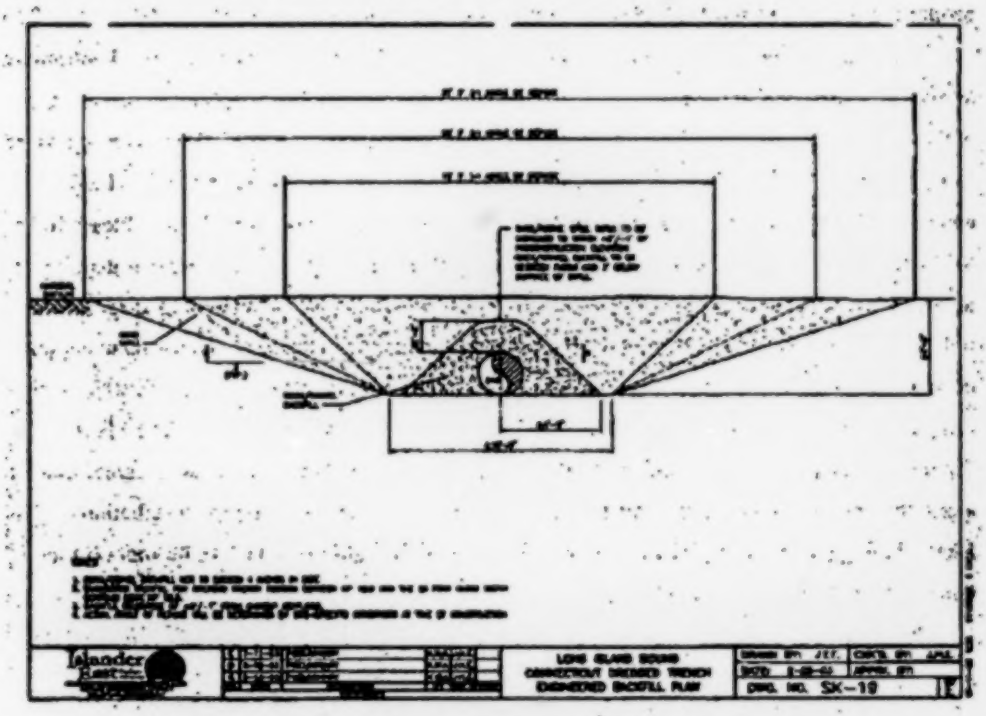

Figure 10. Potential trench side slopes from DEP R. 93.

The most waterward end of the pullback string would be brought onto a laybarge at the site of the exit pit. On the laybarge, the construction of the pipeline is accomplished in an assembly-line fashion. The Marine Pipeline Installation Methodology describes the pipelay barge to be between 260 feet by 72 feet and 400 feet by 100 feet with a draft (depth of the vessel below the waterline) as much as 16 feet. Is-

lander East has not addressed the apparent contradiction between the exit pit water depths of only 13 feet deep and its proposal to utilize a barge with a draft of up to16 feet. It is possible that the applicant would need to restrict the loading of a larger barge, use smaller barges with reduced draft, or even undertake additional dredging to accommodate the deeper-draft laybarge.[47] The Department cannot determine the extent of potential impacts from bottom disturbance or dredging associated with use of the proposed laybarge from the information provided by the applicant.

Assuming that a laybarge could somehow be employed as proposed, the vessel will move slowly forward along the one-mile trench segment by pulling itself on the forwardmost anchors, placing the pipe inside the trench as it moves. It would use an array of 8 to 12 anchors deployed from 1,200 to 2,000 feet on each side of the pipeline depending on the water depth. These anchors stabilize the laybarge as the pipe string is processed and placed overboard. Please refer to Figure 11. The anchors would be reset by several attending tugboats. In deeper waters, there is greater distance between the deployed anchors than in more shallow waters. Islander East failed to provide the size and weight of the proposed anchors; however, the Department is aware of other projects where similar types of barge-mounted construction equipment was employed in Long Island Sound

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[47] While there was no discussion of flotation trenches in DEP R. 7, Attachment C contained Sheet 9 of 120 entitled "Typical Floatation Trench Cross-Section." This cross-section, provided as Appendix D, attached hereto, contains a note that explains: "This trench required in shallow areas to achieve minimum barge flotation depth of 8 feet."

where anchors ranging from 7 to 15 tons each were used.[48] The Marine Pipeline Installation Methodology indicates that the anchors are held in place with cables that lie along the bottom for a maximum distance of 600 feet. In the Marine Pipeline Installation Methodology (at 3) it is suggested that the remainder of the cable lengths will be kept off the bottom by using midline buoys.

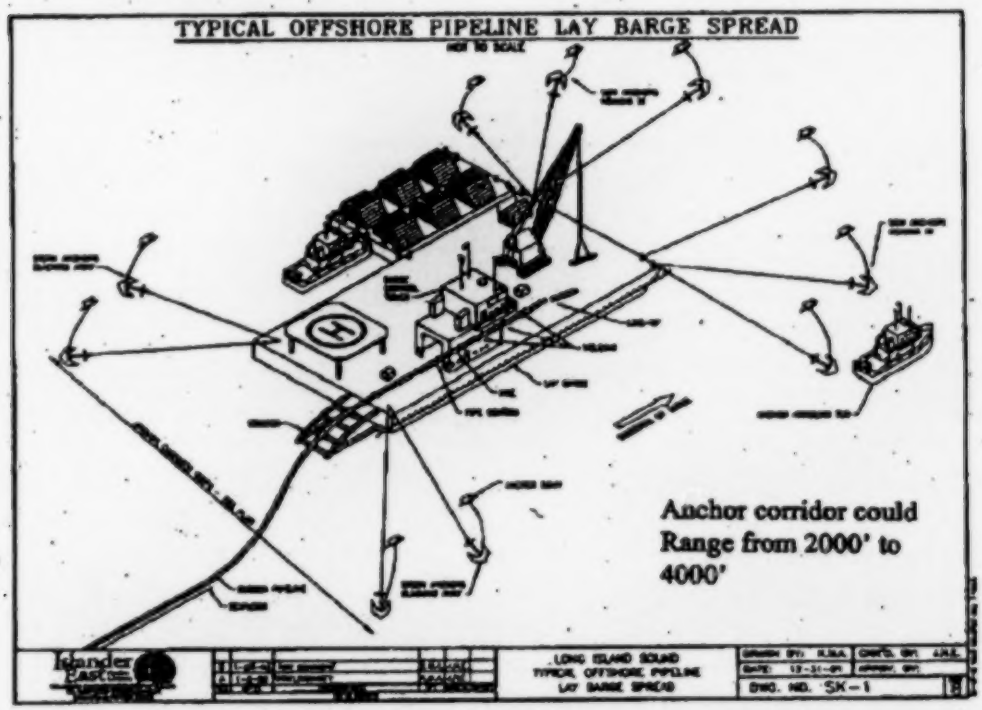

Figure 11. Laybarge with anchor spread from DEP R. 7, Attachment C.

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[48] Betsey Wingfield, Assistant Director of the Department's Office of Long Island Sound Programs from 1997 until 2003, served on the Governor's Task Force under Public Act 02-95 concerning the Protection of Long Island Sound. Project was the Iroquois Gas Transmission System Eastchester Extension Project. Please refer to Appendix E, attached hereto, for a list of Taskforce technical presentations.

Plow Segment

From Milepost 12 to Long Island, the laybarge would continue, placing the pipe directly on the seafloor rather than in a pre-constructed french. The barge would return to Milepost 12 to complete a trench pass where a plow is lowered over the pipe and towed so that as the plow moves forward on the seafloor, the soil is mounded on both sides and the pipe is lowered into the trench in the same pass. Please refer to Appendix F, attached hereto, for schematics of this methodology provided by Islander East (in DEP R. 26 and DEP R. 7). Islander East's application materials indicate that the plow-created trench would be 5 feet deep by 25 feet wide at the top with spoils mounds extending 25 feet on each side of the trench. Once this next pass across Long Island Sound is completed, the barge returns again to Milepost 12 where the plow wings are reversed and the trench is backfilled with the native sediment that was previously mounded along the trench sides. The applicant suggests that after these three passes are completed, the pipeline from Milepost 12 to the New. York line would be completely buried with 2 feet of native substrate.[49]

Due to physical restrictions preventing the use of the plow in shallow waters, the plow technology only works in waters that are 20 feet deep or deeper. Because waves and wind-generated currents are not as substantial in deeper waters as they are in more shallow waters such as those in the vicinity of the exit pit, the Department's evaluation reveals that while the sedimentation and turbidity associated with the plowed sediment mounds would be substan-

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[49] The 2 foot burial depth was proposed in DEP R. 69.

tial (DEP R. 111), they would likely be found acceptable for this portion of the installation. With the ability to store the native material adjacent to the plow trench, this material can be backfilled upon pipe installation.

Engineered Backfill

Unlike the final pipeline segment, the exit pit and the mile-long dredge trench are proposed in waters between 13 feet and 20 feet deep where waves and wind-generated currents prevent Islander East from successfully temporarily mounding native sediments adjacent to the trench. After revision of installation technology from sediment mounding to sediment removal by barge, Islander East held a technical meeting on April 15, 2003[50] with the Department, DA/BA, and the National Oceanic and Atmospheric Administration's ("NOAA") National Marine Fisheries Service ("NMFS") staff to receive technical input. It was determined that Islander East would need to conduct a study to conclude what trench backfill material would not be subject to scour and erosion. Technical experts at the April meeting, including Mike Ludwig (NMFS), George Wisker (Department) and Dr. Bohlen theorized and agreed that Islander East's interim backfill plan, consisting of sand and rock (March 27, 2003 correspondence, DEP R. 67), would be subject to significant scour and erosion in the trench.[51] In response to this observation, Islander East hired Haley & Aldrich to "evaluate proposed sand backfill mate-

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[50] DEP R. 70 meeting notes.

[51] While scour and erosion of backfill trench material were the primary focus of agency comments at this meeting, subsequent shellfish habitat discussions focused on the extent of impacts the backfill would have on harvesting equipment operations.

rials available from local sources and provide comments and recommendations for:

— Suitability of proposed backfill

— Maximum height of free-fall (from sea bottom to bottom of tremie pipe[52]) to minimize loss of fine-grained soil

— Optimum size of tremie pipe

— Potential for long term scour of the back fill material."

DEP R. 84 contains Haley & Aldrich's "Report On Engineered Backfill Study Islander East Natural Gas Pipeline Branford, Connecticut" which concluded with a recommendation to backfill the trench with bank-run[53] gravel that contained mostly gravel, no more than 2 inches in diameter and coarse sand (approximately .187 inch in diameter) with a smaller percentage of fine sands. Haley & Aldrich at 4 concludes with:

> "In our opinion, the proposed gravelly coarse to fine sand backfill can be placed by tremie methods. We recommend that the tremie pipe have a minimum diameter of 18 in. to limit the potential for bridging of the backfill in the tremie tube during placement. In order to minimize the amount of fine material in the backfill suspended in water, we recommend that provisions be made

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[52] A tremie pipe is comparable to a funnel—a barge on the surface of the water would use the tremie to better control where the backfill material was placed on the seafloor.

[53] Bank-run gravel is a term used to define aggregate taken from a natural deposit, usually from a riverbed. The term is derived from "run-of-bank" gravel. It is the Department's understanding that this material is difficult to find as many states do not allow mining of the rivers.

> to adjust the length of the tremie pipe so that the bottom of the tremie pipe is not more than 3 ft. above the original seabottom as determined at the side of the trench."

The Department concurs with Haley & Aldrich's assessment of engineered backfill requirements. However, Islander East is unclear about its commitment to using the specific engineered backfill that Haley & Aldrich has recommended. In DEP R. 60, Attachment B at 6, TRC referred to the backfill as sand on top of rock: "Rock or gravel of less than 4 inches in diameter is being considered because of its cost, ease of handling, benefits as cover for the pipeline, and other potential habitat benefits." In DEP R. 84, Haley and Aldrich specifically recommend "bank-run gravel that contained mostly gravel, no more than 2" in diameter."

In addition, Islander East's suggestions regarding disposal options (DEP R. 93) appear to retreat from the conclusion reached during the agency technical discussions on April 15, 2003. At page 10 of the July 29, 2003 correspondence from Islander East, the following is noted:

> "If an excess of 24,000 cubic yards of sediment is dredged, the sediment will be returned to the HDD exit area during backfilling. During the April 15, 2003 multi-agency meeting, Islander East indicated to Federal and state agencies that it would be feasible to return up to approximately 3,000 cubic yards of dredged material to the HDD exit area. The excess dredged material will be held on a barge during the period of construction, and then placed in the exit area and capped."

This theoretical disposal concept was mentioned by Islander East at the April 15 meeting, but was never thoroughly described then or at any later date in any submissions from the applicant.[54] Accordingly, the Department could not analyze or review the applicant's analysis of any sediment characteristic changes resulting from dredging and temporary storage on barges.[55]

More troubling, the applicant's own May 2003 submission (DEP R. 84 at 16-1) explains why the native dredge spoil should not be reused: "[t]he temporary storage of spoil would be inefficient and slow. Additionally, backfilling with native spoil would increase sedimentation with the use of the clamshell bucket during backfill operations." Even so, at 16-2, Islander East goes on to describe why the agreed-upon use of a tremie tube to minimize sedimentation would not be feasible: "During the multi-agency meetings in March 2003, during a discussion regarding the backfilling of the dredge trench, Dr. Frank Bohlen stated that based on the samples obtained along the proposed route, the tendency of the spoil would be to remain consolidated. This characteristic would make replacement of the native spoil with a tremie tube impracticable, therefore backfilling would need to be completed with a clamshell bucket."

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[54] There has been no discussion of sedimentation resulting from backfilling with this fine grain native sediment. In addition, as discussed above, the infeasibility and potential adverse impacts of staging a full barge in water only 13 feet deep have never been addressed.

[55] It is well known to the Department that the process of dredging generally breaks up the sediment (disaggregates) and allows water to "fluidize" the soil consistency, changing the characteristics of the original in situ material.

It is evident that there are significant discrepancies in the record regarding the methodology for the placement of the engineered backfill and even of what material the engineered backfill would consist. From an environmental perspective, an important factor in any ecological prediction for potential recovery rates is an understanding of the proposed habitat type. Considering that Islander East has not definitively even determined the nature or grain size of the materials to be replaced into the trench, it is impossible to even speculate as to which types of fauna would be able to inhabit this area in the future, let alone estimating any potential recolonization or recovery rates.

In sum, because of the missing and contradictory information supplied by Islander East regarding the construction methodologies to be used in the dredging and backfill segment of the proposed pipeline, the Department must conclude that Islander East failed to meet its burden in demonstrating consistency of the proposed activity with the State's Water Quality Standards. Specifically, there are problems with:

- Potentially underestimated dredge volumes making it impossible to predict the full extent of water quality impacts associated with sedimentation;
- Undefined vessel draft requirements for work in shallow water most likely resulting in an underestimated scope of dredging; and
- Discrepancies in the record regarding the type of backfill to be used making it impossible to determine:
  - — the full extent of resulting sedimentation;
  - — scour resistance; and

— a reasonable prediction of benthic community establishment without the exact sediment grain size difference between the existing native substrate and the new backfill.

Regardless of which of the two proposed types of backfill that Islander East plans to use, the habitat will be changed and an existing use will be lost in direct violation of WQS No. 1 and No. 2.

Resource Impacts from Pipeline Installation

The proposed pipeline installation would have numerous impacts on water quality and coastal resources resulting from sedimentation, turbidity, and direct substrate disturbance associated with dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping.

Direct Bottom Disturbance

The FEIS at 3-49 lists potential direct impacts associated with bottom disturbance as "habitat alteration; sediment disturbance, transport, and deposition; and potential adverse affects to marine organisms, including mortality." The paragraph continues: "[t]he primary concern is impacts to benthic marine organisms, particularly shellfish beds located between MPs 12 and 13, and fisheries resources and habitats in the nearshore and shallow marine environment." The Department concurs with this summary in the FEIS.

The following table of direct substrate disturbance in Connecticut was compiled from documentation provided by Islander East (DEP R. 60, 72, 125).[56]

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[56] The table at page 4 of DEP R. 60 indicates the "Plowing/Burial" area for Connecticut as 81.2 acres. Based on the num-

Area Description	Equation	Area	
Anchor Strikes	18 strikes @111 acres of		3.20 acres
Anchor cable sweep	impact/mile x 8.92 miles		1,023.00 acres
HDD Exit Hole (MP 10.9)	130 feet x 301 feet	39,130 s.f.	0.89 acres
Dredge Section (MP 10.9-12)	37 feet x 5,851 feet	216,487 s.f.	4.96 acres
Plow Section (MP 12-20.9)	75 feet x 46,992 feet	3,524,400 s.f.	80.90 acres
			TOTAL = 1,112.95 acres

The Department does not dispute these calculations for the direct disturbance acreage. While there are several discrepancies in the record as far as the exact numbers used in the equations,[67] the total acreage is an acceptable approximate estimate. The exact disturbance area within shellfish beds for the trench and plow segments are provided in Appendix G.

Anchor sweep impacts

A note in correspondence dated April 28, 2003 (DEP R. 72) indicates that the anchor and cable sweep area alone (without the plowing and burial) occupies 23% of a "corridor." In Dr. Pellegrino's Bottom Characterization Survey (at 2) the pipeline construction corridor is described as "the anchor spread to be used for construction barges." TRC's 2002 Impact Analysis Report at 28 also offers: "Extending further out, and indeed defining the limits of the overall width of the pipeline corridor are disturbances associated with anchoring of the work barges." As previously discussed in the Pipeline Installation Methodology section of this Decision, the anchors would extend from 1,200 to 2,000 feet on each side of

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bers provided in DEP R. 72, the HDD Exit Hole, Dredge Section and Plow Section total 86.7 acres. It would appear that 86.7 acres is accurate since the equations are provided and equal the indicated numbers.

[67] DEP R. 72 calculates the anchor strike and cable sweep for 8.92 miles (47,097 feet) of plow section. The same document indicates that the plow section is 46,992 feet.

the pipeline depending on the water depth. The Department has previously calculated the anchor spread construction corridor between MP 12 and MP 20.9 to be 3,700 acres, as follows:

Location	Square feet
HDD exit hole 130' x 301'	39,130
Dredge trench 37' x 5851'(anchor corridor not included)	216,487
13,390 linear feet x 2,400' anchor corridor	32,136,000
9,790 linear feet x 3,600' anchor corridor	35,244,000
23,640 linear feet x 4,000' anchor corridor	94,560,000
TOTAL	162,184,540 = 3,723 acres

The dredge section from MP 10.9 to MP 12 was not included in the calculation as it is not clear from the record if the laybarge will need the 9 point anchor array in this work area. While Islander East has not offered a discussion of the impacts in this area, maps in Attachment C of DEP R. 7 do indeed show an anchor corridor 1200 feet on each side of the pipeline in Town of Branford shellfish beds. Therefore, the application has likely underestimated the dredge trench disturbance corridor area by 322.4 acres and the actual anchor impact corridor should be 4,045 acres.

Islander East has not provided the exact weight and size of laybarge anchors. TRC's 2002 Impact Analysis Report at 30 does offer that "each anchor placement is expected to disturb approximately 200 sq ft of sediment. A portion of this area, however, overlaps with the calculated cable sweep areas." Figure 12 (from DEP R. 72) shows a representation of the anticipated anchor and cable sweep area. Under cover letter dated August 21, 2002, Islander East provided a copy of the "Gulfstream Report" (DEP R. 124). This report was a post-pipeline installation sur-

vey conducted off the Florida coast in the Gulf of Mexico and focused on the effectiveness of mid-line buoys to prevent bottom impacts. Findings in this report are as follows:

> "Based on ROV survey, the anchor footprints typically measure approximately 15 to 20 feet in diameter and 2 to 3 feet deep. Most of the anchor footprints evaluated had 2 to 3 foot wide and 1 foot deep associated cable footprints leading away from the anchor depression. Away from the anchor depression, cable footprints usually narrowed to a surficial linear trough 1 to 1.5 feet in width at the top, and 4 to 8 inches deep in soft bottom."

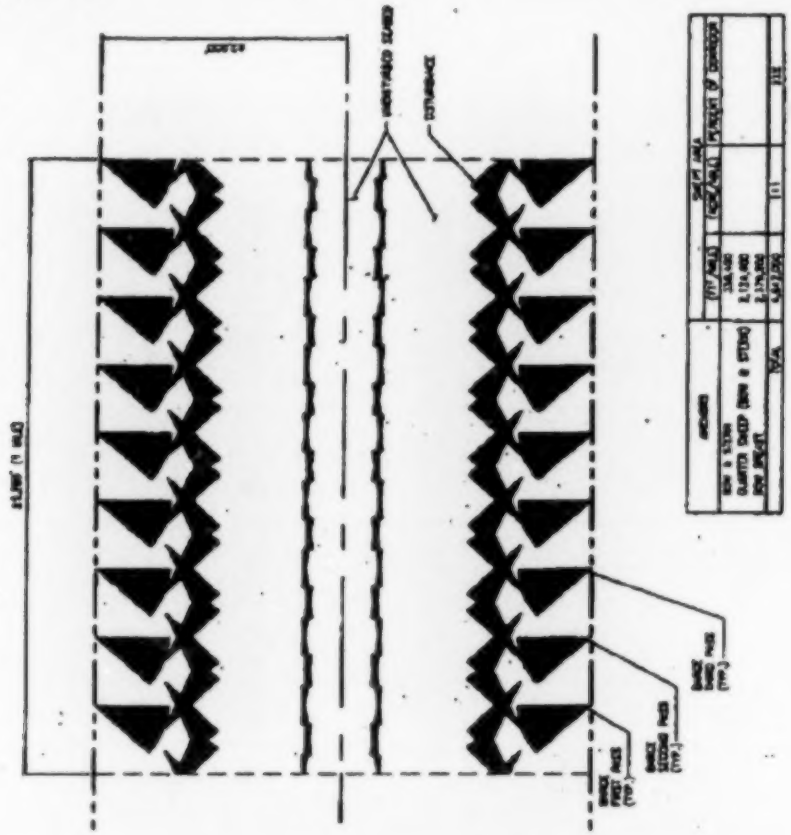

Figure 12. Anchor and cable sweep area from DEP R. 72.

While intended to show the mitigating factors of midline buoys ("MLBs"), the report and associated cover letter actually highlight the benthic impacts associated with anchor cables.[58] Islander East's letter explains that "side scan sonar results show that the average length of the anchor cable surficial footprints with MLBs was approximately 2,033 feet; without MLBs the footprint increases by 981 feet to approximately 3,014 feet.[59] It is evident that MLBs function to somewhat mitigate the impacts, however, even 2,033 is an unacceptable loss of habitat, especially given the other impacts associated with the project.

However, the Department does find anchor impacts from a pipeline installation in Long Island Sound applicable to anticipated impacts from the Islander East project. As noted in the Department's previous 2004 WQC denial (DEP R. 112), the Iroquois pipeline was installed through the nearshore waters of Milford, Connecticut in 1991 ("Milford Iroquois"). The Department is aware that the installation technologies are not the same as those currently proposed by Islander East. Regardless of the installation technology of the pipeline itself, the Milford Iroquois project is relevant because the anticipated anchor strike and cable sweep impacts are comparable.[60] Islander

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[58] The Department recognizes that the bottom impacts discussed in this Gulfstream survey do not necessarily translate into expected impacts in Long Island Sound as the bottom substrate at the Florida site was found to have "slightly silty medium to fine calcareous beige to gray clean sand" at 11 of 19. Also, the Gulfstream report does not address current velocity impacts on sediment nor does it provide the timeframe between installation and the survey.

[59] DEP R. 124.

[60] In TRC's 2002 Impacts Analysis Report at 30, the cable sweep impacts are described as follows: "The cable sweeps may

East's proposed use of the mid-line buoys would minimize cable sweep, but not eliminate it. In reviewing this project in 2002, the Connecticut Siting Council received testimony from Larry Williams, a commercial shellfisherman who worked the oyster beds around the Milford Iroquois installation. Through personal experience, Mr. Williams observed anchor scars as long as five-hundred feet and seven to eight feet wide, and as deep as six feet. In the four-year period during which he directly observed the bottom conditions in that installation area, the seafloor had not recovered to pre-installation conditions. (DEP R. 22, April 17, 2002, id at 93, 96). Islander East dismisses this bottom scarring issue and asserts that the scarring was attributed to failed attempts by Iroquois to smooth the seafloor after pipeline installation. Whether due to scarring from anchors or failed attempts to smooth the sea floor the fact remains that damage to the sea floor had not recovered after four years. While the record clearly demonstrates that there will be significant bottom disturbances from anchor scars and cable sweeps (DEP R. 22, 72 and 124), Islander East has neither offered restoration of bottom topography nor provided

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disturb the sediments in several ways. Placement of the cables and their subsequent tensioning and retrieval, may cut into the sediments and disturb their upper layers, likely generating a rougher sediment surface layer and causing some mortality of the infauna. However, it is anticipated that some portion of the community will survive. There may also be sediment resuspension, which may cause increased sedimentation in areas outside of the 2,400 ft wide pipeline corridor. For any one anchor sweep area, the cable will be in place for less than 1 day. It is likely that some anchor cable sweep areas may be disturbed on successive passes, which may act to reduce the total area that would be affected by anchor placement."

documentation to demonstrate that restoration is possible.

Dredging and associated impacts

A maximum estimated total of 28,300 cubic yards of native sediment will be excavated from the HDD exit pit and the dredge trench. In addition, there are unquantified impacts including anchor strikes, spud utilization and prop scouring[61] associated with operating the barge and work vessels in these areas. Islander East's application does not specify whether the laybarge in the dredge trench segment will employ a different anchor array than that proposed to be used within the plow segment, but assuming the anchoring arrangements to be the same, the work within the dredge trench area will create a minimum of a 2400 foot wide anchor corridor that would be expected to extend into Town of Branford managed shellfish beds and 5 State lease beds as identified in Figure 13. As previously mentioned in the Pipeline Installation Methodology section, other benthic impacts associated with bentonite containment systems could not be reviewed as the methodology has not been finalized.

After pipeline installation, Islander East's modified plans have proposed to backfill the exit pit and dredge trench with engineered backfill. This backfill area, beginning at the exit pit, would be 130 feet wide by 301 feet long. The 130 foot width would taper to 37 feet wide where the trench begins. The 37 foot wide trench would then continue for 5,851 feet where the plow section of the pipeline installation would begin.

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[61] Prop scour is the movement of sediment caused by the turbulence of the propeller. The extent of damage to the substrate depends on sediment type, water depth and vessel draft.

A total of 5.58 acres of native compact silty clay sediment would be replaced with engineered backfill. Islander East has assured the Department that this area could be restored to topographic variations of no more than +2 feet/ —1 foot by using a tremie tube and carefully controlling the tube's position and the backfill flow rate (DEP R. 84 at 234). In direct contrast to this assertion, however, Islander East's own consultants stated at a March 4, 2003 meeting that modeling of post construction surface topography could not be conducted because "the variability in the trench surface is not possible to determine" (DEP R. 58). The record contains no evidence to support Islander East's prediction that topographic variations of no more than +2 feet/ —1 foot can be achieved and the Department rejects the bald assertion in favor of Islander East's consultant's March 4, 2003 position.

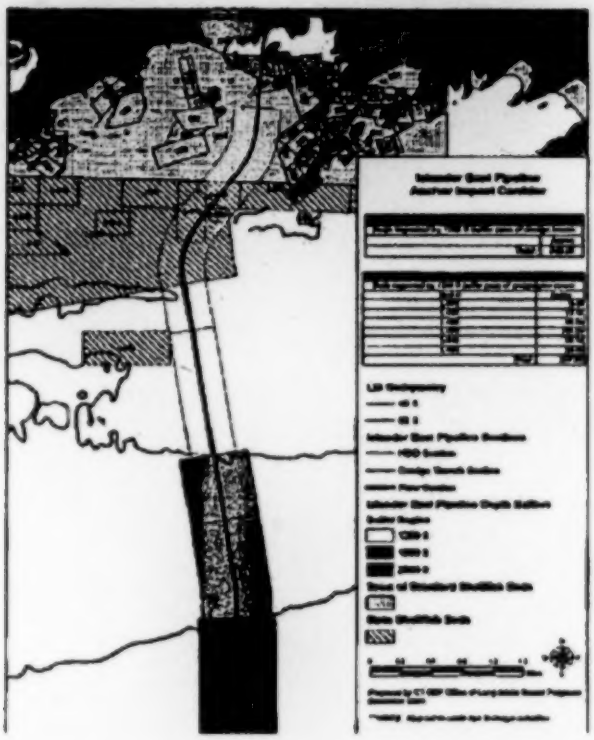

Figure 13. Anchor impact corridor.

Plow impacts

The plow segment would be backfilled with native material that was previously mounded during the second laybarge pass. Islander East has not made any credible demonstration that this area will be restored to approximate pre-existing conditions. Based on agency experience, it is difficult, if not impossible to restore the seafloor to pre-construction conditions because depressions in the sediment become areas of either erosion or deposition. As previously mentioned in the Pipeline Installation Methodology Section, dredging and general excavation of the substrate breaks up the compact fine grain sediment and allows water to "fluidize" the consistency. Once these sediments are disturbed by dredging, they will no longer exhibit the consolidation, high density and cohesiveness of the undisturbed, in-situ sediments and they would be easily eroded in areas of high current velocity. Alternatively, depressions left on the seafloor in areas of lower current velocity may become traps for the fluidized sediments. This phenomenon is mentioned in the FEIS at 3-65 regarding impacts associated with the anchors and cable sweep: "These long lasting depressions can act as sediment traps accumulating fine sediment and organics, which can lead to anoxic sediments that develop considerably different communities from the original deposits (Hall, 1994). The persistence of these depressions would represent a long-term conversion of benthic habitat."

Time does not necessarily heal the scars left by underwater utility installation. The record contains discussions of two other utility projects completed 30 years or more ago that, even today, have visible scars. A June 4, 2003 memo from William Hogarth to

Brandon Blum (DEP R. 86) cites a recently conducted benthic profiling study for a 1974 water line installation in the Hudson River which has yet to recover to its preconstruction condition. Mike Ludwig (NMFS), at a Joint Task Force and Working Group[62] meeting, presented an aerial photo of the Connecticut Light and Power "1385" cables (DEP R 122). The aerial photo, Figure 14, below, was taken on November 1, 2001. The photo clearly shows that the cables, which were installed in 1967-1969 through Sheffield Island in Norwalk, left visible scars through the shallow water near the island. These scars persist, even today. While the installation technologies, sediments, and currents vary with every project, the substrate impacts are long-term, in these particular cases over 30 years.

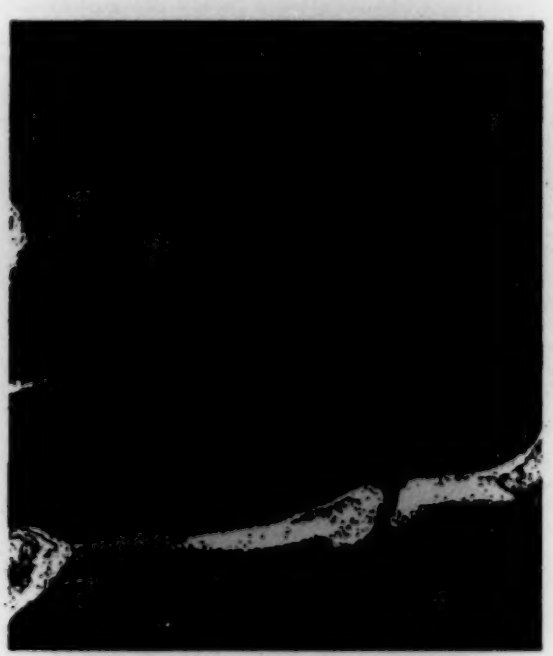

Figure 14. November 2001 photo of "1385" cables installed in 1969, from DEP R. 122. Note benthic scarring on right side of photo.

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[62] Please refer to Appendix E, attached hereto.

Islander East dismisses this scarring issue and asserts that installation technology has dramatically improved since these projects were completed. Indeed, the use of HDD could have prevented substrate surface scars across the Hudson River, but the important fact to be derived from the study of these earlier projects remains valid—where the sediment was disturbed, it has never truly recovered. While the use of HDD may prevent surface scarring along the proposed HDD section, once the HDD breaks through the "surface" and traditional installation techniques need to be employed, there will still be significant long-term scarring associated with the exit pit, dredging, plowing, anchor craters and cable sweeps. In addition, clean-up of any frac-outs along the HDD path is also likely to create scars. Unfortunately, marine construction technology has not advanced to a stage where it can recreate substrate that was created by the compression of a mile-thick glacier and the accumulation of compressed silt over thousands of years. The Department is aware of no installation project that has successfully installed utilities and that has been able substantially to restore the impacted seafloor to prior existing conditions and Islander East has offered none. The resource impacts associated with these projects are, essentially, permanent.

Water Quality Impacts

The proposed pipeline installation would impact water quality in several ways: it would temporarily increase turbidity; result in the temporary containment of seawater for hydrostatic testing of the pipeline; and cause drilling mud to be released into the water column.

A combination of exit pit and trench excavation; propeller scour from barge and deep draft vessel operation in shallow water; anchor deployment, drag and retrieval; anchor cable scour; plowing and backfill; and the installation of engineered backfill from a vessel on the surface will all result in the release of sediment into the water column. "Once disturbed, these fine-grained sediments would become temporarily suspended in the water column, resulting in a 'plume' of turbid water that drifts with the water currents and eventually would settle on the bottom. The plume's duration, extent of dispersal, and aggregation rate of the suspended particles depend on many site-specific variables" (FEIS at 3-49).

The resulting impacts of suspended sediment and turbidity on water quality are expected to be relatively short term and equivalent to that of standard dredging operations routinely authorized by this Department. However, the following key distinctions apply: the scale of most dredging operations is not as significant as that proposed by Islander East; the dredging is usually routine maintenance of an existing footprint; and new dredging is strictly limited to those applicants who provide or support water-dependent uses.[63]

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[63] A water-dependent use is defined by statute as "those uses and facilities which require direct access to, or location in, marine or tidal waters and which therefore cannot be located inland," CGS section 22a-93(16). A natural gas pipeline is not considered a water-dependent use. Tilcon Connecticut, described earlier in this Decision, is an existing historical water-dependent facility that receives water quality certifications from the Department on a regular basis to conduct maintenance channel dredging for sufficient barge navigation.

The 2002 Impacts Analysis Report by TRC summarizes the response of benthic organisms to increased turbidity as follows: "[m]any estuarine benthic organisms are adapted to life in turbid waters and should be able to withstand the short influx of higher amounts of sediment associated with pipeline construction through a combination of avoidance (*e.g.* reducing activity, retreating into the sediments, closing valves for bivalves) and repositioning themselves in the sediment if the sediment deposition is high." The Department recognizes that turbidity is generally short-term and does not pose significant long-term impacts to resources. For this reason, the temporary release of sediment into the water column associated with this segment of the Islander East project is not inconsistent with the Department's Water Quality Standards.

In TRC's 2002 Impacts Analysis Report, an additional water quality impact from hydrostatic testing of the pipeline was addressed. TRC noted that three separate tests were proposed to be conducted within Long Island Sound which, according to TRC, would result in minimal impacts to existing water quality. Hydrostatic testing is completed by filling the pipeline with water and adding pressure to detect leaks or flaws in the pipeline. The first two tests would be conducted on the HDD pullback string in Connecticut waters using untreated seawater. A third test of the entire marine pipeline section would be conducted at the New York landfall with treated seawater to be neutralized prior to discharge back into New York waters.

The Department recognizes both the proposed and accidental release of drilling mud as a short-term impact on water quality. However, the impact to benthic

organisms would be devastating. Because of the significant benthic impacts, the release of drilling mud is addressed in a separate section of this Decision, below.

Sedimentation

Sedimentation is the term used to describe the process of suspended sediment material settling out of the water column onto the seafloor. In TRC's Vibratory Core Sampling Report (at 3 of 7), it is noted that "[t]he sediment entering the water column will be transported and redeposited adjacent to the work area in a manner depending upon such factors as grain size distribution and currents." Other variables impacting transport and deposition noted in the FEIS at 3-49 include "water depth and temperature, current velocity and tidal stage, wind directions and speed, etc." As described below, sedimentation associated with the proposed pipeline installation may have significant impacts on resources and may cover a larger area than the pipeline corridor as defined by the anchor impact area.

The Department acknowledges that Islander East has made substantial improvements in reducing a significant source of potential sedimentation by modifying the originally proposed pipeline installation methodology. The fact remains that a significant area of both natural habitat and prime shellfishing beds would be exposed to sedimentation exceeding normal levels and for extended periods of time. The Department does not suggest that sedimentation would change the substrate. Rather, sedimentation would alter the benthic habitat through deposition of a fine layer of fluidized material on the existing substrate. Eventually, this layer of sediment may be incorporated into the 10 millimeter thick "nephloide" layer

described by Dr. Bohlen, or be dispersed by currents if settled over harder substrate such as reefs or bedrock outcrops.[64]

Benthic habitat can be significantly altered by sedimentation when a blanket of silt covers the benthic surface including the benthic epifauna and infauna.[65] The general effects of sedimentation on benthic organisms have been summarized in TRC's 2002 Impacts Analysis Report[66] as follows:

> "Obvious effects of dredge-induced sedimentation include smothering and burial of organisms. While the burrowing ability of a variety of benthic organisms through varying amounts of overburden is reasonably well documented (e.g., Maurer et al. 1978), sessile[67] and discretely motile benthic organisms are most susceptible to dredge-induced sedimentation. Unfortunately, limited data presently exist to determine both the short- and long-term effects of enhanced sedimentation on most species of sessile benthic organisms.
>
> Other effects of sedimentation on the benthos include disruption of larval settlement patterns

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[64] The nephloide layer is distinct from a layer of sedimentation. The nephloide layer as defined by Dr. Bohlen is the top 10 mm of substrate that is prone to resuspension. Over a short-term period, a layer of silt (from sedimentation) may be deposited on top of the nephloide layer.

[65] "Epifauna" is a term that describes animals that live on the seafloor such as starfish and crabs, "infauna" describes animals that live in the seafloor such as annelids and clams.

[66] Appendix I at 3.

[67] Sessile benthic organisms are those that are permanently attached and cannot move on their own accord. An oyster is a sessile organism.

and increased physiological stress. For example, Galtsoff (1964) noted that as little as 1-2 mm of silt may be sufficient to inhibit settling of oyster larvae. Sediments may also prevent larval settlement by interfering with chemical cues (e.g., Crisp 1967; Hidu 1969). In addition, Trueman and Foster-Smith (1986) have demonstrated that the energetic cost of burrowing can be large. While Carriker (1986) has noted that oyster larvae can attach to surfaces fouled by mucoid films and detritus, seasonal timing of dredging activities should consider if the dredging activities lie within the proximity of identified recreational and/or commercially important shellfish beds."

The Roberge Report dated February 4, 2004 buttresses these findings wherein it states that "benthic species will likely be killed even in areas receiving a thin veneer of deposited sediments" and this report, at 3, also noted the study by the Corps that found "sediment deposits of up to 1 mm will cause up to 50% mortality, and deposits of up to 2 mm will cause 100% mortality to some benthic species." In addition to the general impacts mentioned above, it is well-known to this Department that juvenile oysters would be adversely impacted by as little as 3 millimeters of sediment.

Islander East's own consultants have recognized the potential for significant resource impacts from sedimentation. In TRC's Vibratory Core Sampling Report (at 3 of 7) it is noted: "[b]ecause the water column effects are brief compared to the redeposition of sediments, results of the vibracore core sample analysis were compared to the Effects Range-Low (ERL) and the Effects Range-Median (ERM) sedi-

ment screening guidelines developed for the National Status and Trends Program (NS&T)." In other words, TRC considered the exceptional habitat quality along the proposed pipeline route and chose to use the stringent NS&T standards developed by NOAA to evaluate the chemical concentration in sediments that would be redeposited. Also, in the Marine Geophysical Survey at 25, OSI recognizes that "[s]hellfish lease areas may be very sensitive to changes in the water column and on the seabed. Agencies responsible for the leases are especially concerned about disturbance of the bottom during construction that could cause re-suspension of fine-grained sediment into the water column and deposition over shellfish beds."

The record contains several contradictory estimates regarding the potential exposure timeframes of benthic organisms to sedimentation, ranging from 6 hours in DEP R. 60 (at 6)[68] to several months in the FEIS (at 5-3). The Department acknowledges that the prediction offered by the FEIS is most likely inaccurate as the FEIS does not consider the modified construction methodology. The Department also notes that there is no explanation as to how TRC came up with an estimated 6 hours for "sediment plume exposure to organisms at any one location." The generalized reference to currents and dredge movement along the pipeline corridor provided in TRC's evaluation does not provide sufficient detail to allow the Department to conclude that this estimate is correct and that it should weigh significantly in the Department's analysis of impacts for water quality certification purposes. The Department reviewed the

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[68] In Attachment B: "Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques."

2003 ASA model provided by Islander East. In that submission, it is clear that ONLY tidal currents were used in the model and not wind and wave velocities. As discussed in the Currents section of this Decision, both OSI (in the Marine Geophysical Survey) and Dr. Bohlen found that wind wave induced velocities on currents were significant in shallow waters. Contrary to the observations of these consultants that sediment transport in the area is "dominated by the combination of wind wave induced velocities and tidal flows" (DEP R. 121, July 2002 at 2), Islander East used a model that did not consider a major sediment transport factor. The 2003 ASA model simulations were run using optimal weather conditions and assume that dredging operations will not occur during "wind events generating currents and waves capable of sediment transport." For this reason, the Department gave no weight to the sediment dispersion predictions offered by Islander East.[69]

In addition to exit pit and trench excavation, there are numerous activities being proposed that will cause the release of sediment into the water column and result in wide-ranging sediment dispersion and sedimentation: propeller scour from barge and deep draft vessel operation in shallow water; anchor deployment, drag and retrieval; anchor cable scour; plowing and backfill; and, the installation of engineered backfill from a vessel on the surface. John Roberge, in his evaluation of sediment dispersion associated with backfilling of the trench, comments that the "effects of the potentially significant turbidity and material deposition within sensitive ben-

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[69] Impact assessments based on these predictions were likewise given no weight. Such assessments were offered in DEP R. 60.

thic communities which could result from the backfilling operation have not been quantified by Islander East" (DEP R. 111, May 2003, at 11).

The Department has found the Roberge documents[70] (DEP R.l 11) to be the most reliable in terms of predicted amount and extent of sediment dispersion, as they take more factors into consideration than the 2003 ASA model offered by Islander East. For example, Mr. Roberge's discussion includes equipment used at different sites, water depths and currents (including near bottom wave orbital velocities), tide directions and storm events. He notes several times that he has chosen conservative values to use in his computation as Islander East has failed to provide critical information regarding best management practices and operational controls. The following sediment deposition pattern was estimated in Mr. Roberge's most updated evaluation:[71]

- 1 mm up to 328 feet from the trench centerline (approximately 86 acres); and
- 3 mm up to 131 feet from the trench centerline (approximately 35 acres).

Figure 15 displays the estimated sedimentation area and the associated tables provide the extent of cover for each shellfish bed.

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[70] Roberge, "Potential Sedimentation Impacts Which Could Result From Dredging, MP' 10.9—MP 12.0 Proposed Construction of The Islander East Gas Transmission Pipeline," May 5, 2003 and Roberge letter dated February 4, 2004 regarding 2003 Islander East Reply Brief.

[71] DEP R. 111, February 4, 2004.

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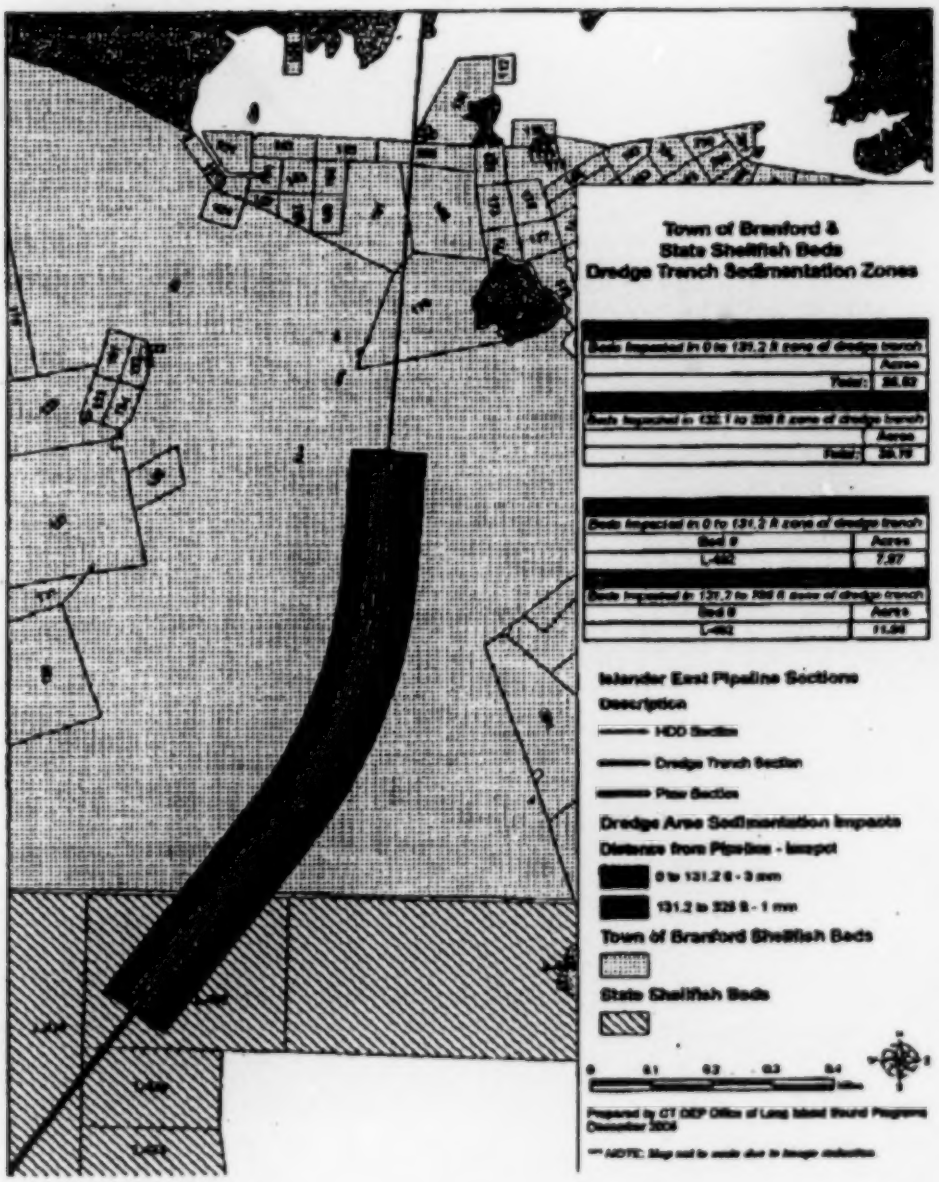

Figure 15. Sedimentation zones.

Drilling Mud Releases

The following table (Figure 16) of anticipated drilling mud, volumes for the proposed project was provided in Appendix A of the Marine Pipeline Installation Methodology (in DEP R. 7):

Drilling Fluid Discharge Estimate

Islander East Connecticut Landfall

Bentonite Yield = 200 barrels/ton
Bentonite Dry Weight = 55 pounds/ft 3
Spoil % by Volume = 2%
Prereaming Recovery = 60%

	Drilling Fluid (barrels)	Drilling Fluid (gallons)	Bentonite (cubic yards)	Spoil (cubic yards)
Pilot Hole	455	19,110	3	2
Prereaming	175,409	7,367,178	1,181	730
Swab Pass	1,655	69,510	11	7
Pullback	5,171	217,182	35	22
Totals	182,690	7,672,980	1,230	760

Figure 16. Anticipated drilling mud volumes from DEP R. 7.

For comparison, 7,672,980 gallons of drilling fluid is equivalent to 37,989 cubic yards or enough fluid to fill the rotunda of the U.S. Capitol Building.[72] As previously discussed in the Pipeline Installation Methodology section of this Decision, the drilling fluid is highly pressurized. This factor contributes to the creation of a situation with potentially hazardous environmental consequences. Once released from the drill hole either intentionally or by accident, large volumes of drilling fluid may enter the water. When exposed to saltwater, "drilling fluids flocculate [lump

[72] From www.aoc.gov/aoc/frequently-asked-questions.cfm.

together] and settle to the bottom" (FEIS at 3-53). Dispersion by dilution of this gel-like mud into the water column is unlikely (FEIS at 3-54).[73]

Michael Ludwig (NMFS), in an e-mail to Sue Jacobson (Department) dated September 29, 2003 (DEP R. 103), provided the following summary of benthic organism response to drilling mud exposure:

> "[d]rilling mud is made up from freshwater and bentonite clays. As a result, the stuff tends to be resistant to dispersion [meaning dilution] when placed in saline waters. Its BOTH the freshwater and the clay that can create the suffocation. Shellfish can close down for several days to almost two weeks dependent on water temperature. The warmer the water the higher the metabolism rate of the organism and the shorter the time it can 'hold its breath.' BUT, it's not holding its breath, even in the dead of winter. Rather, they are frying to use the overlying water to get oxygen. It samples the water, senses the freshwater and re-closes. During the sampling some clay is pulled in and settles on the gills and abrades them. This causes the organism to try and clear the clay by forming 'pseudo feces' wrapped in 'mucus.' The effort to clear the lamellibranch gill structures requires energy and further increases the metabolic needs of the organism. Sometimes the clearing looks like/ is related to the 'coughing' action in humans. Each cough draws in more drilling mud mixture.

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[73] Dispersion and dilution are inappropriately interchanged throughout the record. Dispersion, in the context of drilling mud in saltwater, is the spreading of the material by wave energy. Dilution is the process of making it thinner by adding liquid. Drilling mud does not dilute in saltwater.

> These events continue until the frac out [accidental drilling mud release] problem is resolved by removal or dispersion or the shellfish exhausts its internal supplies of oxygen and suffocates. Compounding these problems is the fact that warmer water holds less oxygen so the shellfish can start the process already stressed. For softer bodied organisms such as worms and crustaceans there are fewer options. After a modest and highly variable metabolic slowdown or 'shutdown,' the organism must cho[o]se flight or death from the freshwater and clay. Climbing upward is possible for some but the density of the drilling mud isn't sufficient to support them all. One of my favorite questions about the flight option is how does a worm determine which way is out? The worms and to a variable extent crabs don't osmoadapt[74] to lowered salinity too well it at all. So, moving through the freshwater based drilling mud is killing them as they move."

Mr. Ludwig's entire email and further references that he provides are included in Appendix H.

The record developed by Islander East submissions glosses over these significant impacts to benthic organisms, especially when the impacts would occur in the Town of Branford shellfish lease beds. Further, the Department disagrees with Islander East regarding the proposed definition of a significant impact after a release. In DEP R. 7, the Directional Drilling Monitoring and Operation Program at 4-9 offers some threshold values for determining the level of impact and whether a certain release would con-

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[74] Osmoadpation is an organism's ability to adapt to fluctuations in external osmotic pressure.

stitute a "significant impact" based on several factors as follows:

- the ability to contain the release within a 200 foot wide corridor centered on the HDD drill path;
- drilling fluid deposits on the seafloor, which do not exceed 24 inches in depth;
- the presence and operation of the vacuum system equipment; and
- removal of drilling fluid deposits must exceed the rate of deposition from a continuing source.

TRC indicates that if an inadvertent spill spreads up to but not beyond 200 feet in width, it may not qualify to be considered "significant." Similarly, an inadvertent spill up to 24 inches in depth, may not qualify as "significant" either. As discussed above in the Sedimentation section of this Decision, as little coverage as 1-2 millimeter of silt can adversely impact benthic organisms, and, therefore, the Department finds that this threshold for "significant impact" is too high. The Department would like to call attention to the fact that the Directional Drilling Monitoring and Operation Program at 4-9 continues with "the decision as to conditions which constitute a significant impact will be based on discussions between the USACOE [Corps], the CTDEP [Department], Islander East, the monitoring supervisor and the driller. The USACOE and CTDEP shall make the final determination or ruling concerning impact decision and further course of action." The Department notes that these discussions have never taken place and are not on record. In this regard, the submission is inadequate.

Exit Pit

The record leaves no doubt that drilling fluid will be released into the water column from the HDD exit pit. In completing the first pilot hole drill path, Islander East indicates that there would be approximately 455 barrels of drilling fluid released when the drill bit first breaches the seafloor (FEIS at 3-53, DEP R.123). The FEIS also indicates that if they allowed "local currents to disperse the mud [it] would result in the coverage of a circular area approximately 444 feet in diameter to a depth of 5 millimeters" (at 3-53). A "circular area" with a diameter of 444 feet translates into a "circular area" with 154,830 square feet or 3.55 acres of impact. Figure 17 shows the anticipated area of shellfish beds covered by drilling mud.

Figure 17. Anticipated release of drilling fluid at exit pit.

The Department finds that Islander East's proposed bentonite release over 154,830 square feet to a thickness of 5 millimeters would create a lethal situation (based on information provided in DEP R. 103) for nearly all epifaunal and infaunal species within a 3.55 acre circular area in the vicinity of the release. This release would occur within Town of Branford shellfish lease beds as shown in Figure 17. Based on the existing currents in this area (described earlier in this Decision), there is little doubt that drilling mud would be spread into surrounding shellfish beds. Islander East has indicated no intent to mitigate or otherwise respond to the release of these drilling fluids associated with the pilot hole breach of the seafloor.

Upon completion of the pilot hole, Islander East has proposed to excavate a sizable (18 foot deep by 130 foot wide by 301 foot long) exit pit. The creation of this exit pit will help to contain the anticipated release of drilling fluids from the reaming passes and the final pipeline pullback. (DEP R. 7, Directional Drilling Monitoring and Operation Program at 1-2). As previously mentioned in the Pipeline Installation Methodology section of this Decision, a plan to control and capture drilling fluid is being considered. Appendix B of the Marine Pipeline Installation Methodology (DEP R. 7) is a document on "Concepts For Subsea Containment of Drilling Fluid" which introduces two potential methods of recovering the drilling fluid. The final decision and development of the system would not be made until after an HDD contractor has been selected. This component of the application is inadequate and insufficient for the Department to determine impacts for water quality certification purposes.

Unplanned Releases

The Directional Drilling Monitoring and Operations Program (DEP R. 7 at 1-1) addresses the likelihood of an unplanned release:

> "While the bentonite drilling fluid is usually contained within the borehole, an unplanned release may occur. This unplanned release can occur when a geologic fault or fissure is initially penetrated, as the drilling fluid is pumped into the borehole under pressure. The occurrence of an unplanned release is dependent upon many factors including: geology, depth of borehole, pressure, borehole diameter, drilling fluid consistency and rate of drilling."

Also, the FEIS indicates there is "a potential that drilling fluids could inadvertently be released to the Sound along portions of the drilled segment through fractures in the bedrock" (at 3-54, DEP. R. 123). This type of accidental release is termed a "frac-out." It has been the experience of the Department that frac-outs occur in at least half of the HDD projects[75] it has regulated (DEP R. 94). It is important to note that this statistic is based only upon reported releases and that the actual rate of frac-outs may be somewhat higher. In fact, many applicants undertaking regulated projects in Connecticut have reported multiple frac-outs on a given project.

Also, it should be noted that the Department's past experience with the HDD technology has generally been with projects that have both entry and exit

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[75] Appendix 1, attached hereto, provides a list of HDD activities in coastal/tidal waterbodies and indicates frac-out occurrence.

points located on the upland—for example, at river and pond crossings. Considering the ease. of accessibility to the land directly above the drill path in upland-to-upland projects, it is reasonable to anticipate that these projects would provide more suitable conditions for thorough pre-construction geotechnical survey work. Yet, even in these situations the rate of frac-outs remains high. In Islander East's case, the proposed route was planned without the benefit of complete pre-construction geological surveys. This information is necessary for the Department to conduct an accidental release assessment and identify the most vulnerable areas within the proposed HDD drill path. It is the Department's opinion that the FEIS review of this particular component of the installation process was inadequate and gave minimal consideration to the issue in light of the significant shellfish resources found in the HDD area.

In general, most frac-outs occur either in unconsolidated overburden soils or in geological transition areas, that is, at the interface between different substrate materials. Of particular concern regarding the use of HDD in the Thimble Islands region is the occurrence of bedrock outcroppings, which further increase the potential for frac-outs. The Thimble Islands are composed of 141 islands and rock outcroppings and it is logically anticipated that the subsurface area is similarly composed of variable geological and bedrock features. See Figure 18 and refer to Figure 3. Though the applicant has yet to provide the Department with a deep subsurface data analysis of the HDD corridor, we anticipate construction-related problems utilizing the HDD methodology in this area. In conceiving and developing the project, the applicant's own consultant, in the Marine Geophysical Survey, recommended that the proposed pipeline

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route avoid areas of near surface glacial till and bedrock (DEP R. 7 at 58). The same survey also recommended that further coring and probing of the surface be conducted. Yet, this is the route that is proposed by Islander East. It appears that these recommendations were offered in an attempt to reduce the probability of a frac-out and increase the likelihood of a successful HDD.

Figure 18. Photograph of Thimble Islands showing bedrock outcroppings.

The Department reviewed survey maps submitted by Islander East that show their proposed HDD route in relation to the initial subsurface geological conditions (DEP R. 7, Sheet 111 of 120, dated 12-4-01). Please refer to Figure 19. Despite recommendations made by OSI in the Marine Geophysical Survey, Islander East proposed the pipeline through an area of near surface glacial till and bedrock. However, since Islander East has not completed or otherwise submitted their final subsurface geological surveys, the geological profile shown on this plan is incomplete. Without Islander East having submitted the

geological surveys, the Department is unable to determine the likelihood of a successful drilling operation or to evaluate alterative routes which may have a higher likelihood of success and therefore a lower risk to the marine environment associated with either (a) a bentonite release, or (b) an alternative (more invasive) construction methodology.

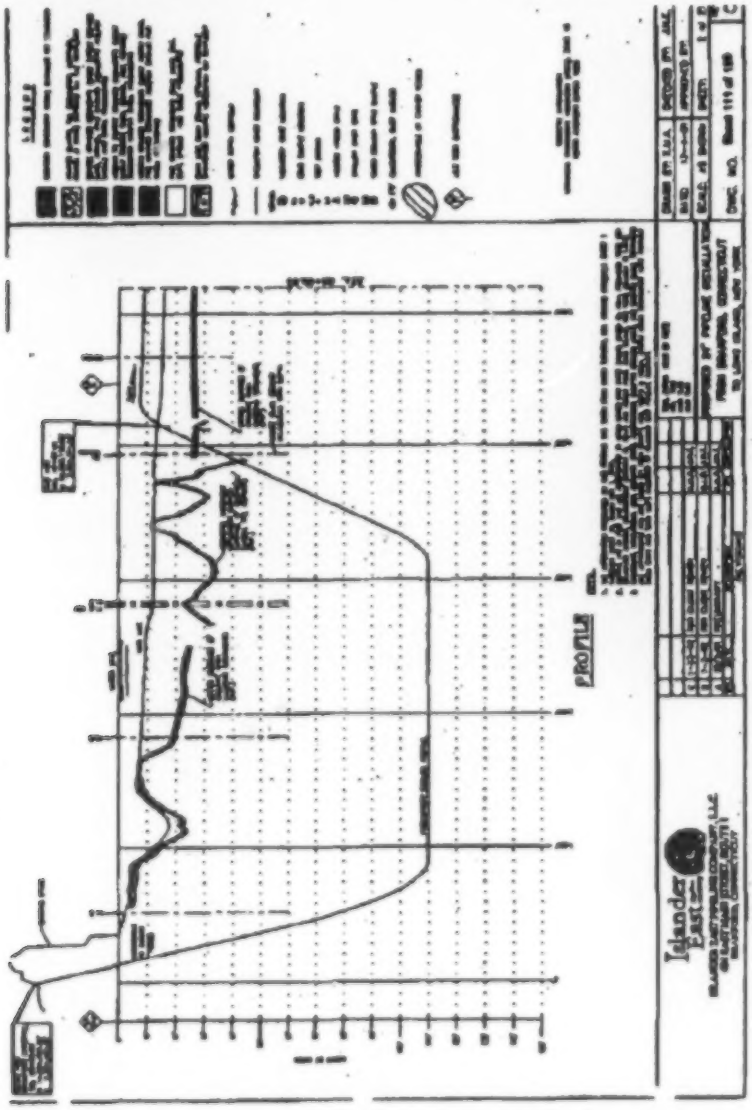

Figure 19. Preliminary survey of subsurface geological conditions from DEP R. 7.

In reviewing this plan (Figure 19) and reading the FEIS, the Department found a troubling discrepancy in the record. The plan shows the pipeline route exiting the "bedrock/glacial till deposit" at approximately 3,900 feet from the upland staging area. The pipeline then enters an area identified as "rich gaseous sediments," which are not uncommon in the Sound. At the point where the pipeline makes the transition from bedrock to the rich gaseous sediments, there is a thickness of approximately 25 feet of total overburden sediments between this point and the seafloor. As the pipeline extends to the south, away from the bedrock and approaches the exit pit, the pipeline moves through the rich gaseous sediments and enters an area identified as "mud." According to this drawing, the mud layer is approximately 12 feet to 15 feet in thickness.

However, the FEIS at page 3-54 states that the "results of the geotechnical investigation conducted to date indicate that overburden (primarily silt, overlying the bedrock) thickness along the HDD route varies from 25 to 90 feet. It is thus expected that any drilling mud released through the fractures in the bedrock would be contained within the overburden and would not be released to the Sound." However, Figure 19 shows the overburden atop the bedrock/glacial till a maximum depth of 45 feet along the first 3,500 feet of HDD at the Connecticut shoreline, not 90 feet as stated in the FEIS. Therefore, the Department finds the FEIS unreliable on this point and it remains skeptical that any frac-outs over the last several hundred feet of the HDD path where the drill leaves the bedrock and where there is less than 40 feet of overburden would be contained within the subsurface materials.

The Department concurs with the FEIS assessment discussed earlier in the Drilling Mud Release section of this Decision that any bentonite released into the marine environment would readily flocculate and not dilute in the saltwater. Therein lies the environmental ramification. The area through which the HDD path is located contains Town of Branford shellfish beds. The risks associated with expected or inadvertent drilling mud releases are particularly high at this location since more than half of the HDD corridor is proposed to pass directly under these locally-managed shellfish leases. Considering the suffocating and smothering effects of the drilling fluid if released onto the seafloor, an inadvertent release in the area of the productive shellfish beds would be devastating. Based on the information provided in DEP R. 103, any frac-out that occurred in this area would be expected to eliminate any shellfish being produced upon those beds. Again, as the Corps study raised in the Roberge Report dated February 4, 2004 indicates, "sediment deposits of up to 2 mm will cause 100% mortality." As shown in. Figure 16, there are Town of Branford lease beds directly above the HDD path and susceptible to damage from a frac-out.

Benthic Recovery

As mentioned earlier in this Decision, the ever-evolving nature of the Islander East project and the numerous amendments have left a patchwork of application materials. Comments regarding generalized benthic recovery predictions related to the original construction methodology that proposed reuse of the native substrate ARE NOT applicable to the revised installation methodology that includes the placement of engineered backfill. The Department has carefully reviewed the record and would like to

make the following clarifications:

- There are no studies or reports in the record submissions of Islander East that address benthic colonization in the engineered backfill;
- A scientific study in ecology always involves utilization of the scientific method which incorporates: observation, hypothesis, prediction, experiment and conclusion.[76] Neither Islander East nor its consultants have conducted any scientific studies to predict the benthic colonization in an engineered backfill activity within a background of soft fine-grained cohesive sediments; and
- An ecological baseline inventory is an investigation involving a series of field surveys for plant and animal species at a designated site. Islander East's consultants have provided, and the record contains, several thorough ecological inventories of the pipeline corridor (DEP R. 7, DEP R. 38 and DEP R. 121), but as inventories, they only describe baseline conditions.

General commentary has been misinterpreted and mistaken as "scientific studies." The Department is familiar with the studies referenced early on in the application process regarding benthic organism response to dredging and disturbance in various habitats.[77] These referenced scientific studies in TRC's

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[76] Scientific studies are reproducible. A thorough evaluation of methods and results should lead to the same conclusions by an unbiased third party.

[77] The Department has dedicated staff that focuses on dredging related issues including dredging and dredge disposal impact analysis as part of the regulatory process. Sediment testing plans and suitability determinations seek input from a

2002 Impacts Analysis Report at 39 include: Newell et al. 1998, Zajac and Whitlatch 1982a,b, 1988, 1989, 2001, McCall 1975, and Rhoads et al. 1978. Also, the Garrett Group report (DEP R. 99/100)[78] similarly cites LaSalle et al. 1991, an investigation focusing on the benthic impacts from dredging and dredge disposal operations. These studies do not consider the colonization of benthic organisms in engineered backfill that has been placed in an area that is composed of primarily fine-grained cohesive sediments.

The Department has considered the Garrett Group, Ltd. report and has given it little weight. The executive summary of the report indicates that no field efforts were conducted in preparation of the report and the conclusions reached by Mr. Garrett were based on a review of documents provided to him by Islander East.[79] While the summary acknowledges that the applicant modified the proposal to eliminate mounding around the trench, there is no mention of the placement of engineered backfill. That said, the Department evaluated Mr. Garrett's findings in the "Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project" at ES-2 where he indicates that bottom damage caused by construction would "alter an

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variety of agencies requiring close coordination with state and federal regulatory and resource agencies, including, but not limited to, the Corps, EPA, NMFS, and DA/BA. Projects originating in NY also involve coordination with the appropriate NY state agencies.

[78] In the certified record, the documents for DEP R. 99 and DEP R. 100 may have been inadvertently switched.

[79] Mr. Garrett is not a noted benthic ecologist with whom the Department is familiar. His name, however, is associated with several wetland-related publications.

existing productive shellfish habitat, and an existing invertebrate community structure" but that "[a]fter all project related activities and secondary conditions associated with the construction have ceased, the bottom will recover after several years and return to the existing condition." This assumption cannot be sustained by the evidence in the record. Islander East's own expert, Dr. Zajac, points out that the benthic impacts of filling in the trenched area have yet to be studied. (See discussion below.) The benthic conditions where the engineered backfill is proposed would be unable to return to the existing condition since the existing substrate will be dredged out and replaced with engineered backfill. The previous benthic community that inhabited that area of the natural sea floor which developed over thousands of years is unlikely to use the engineered backfill since it provides an entirely different type of habitat. For example, many of the benthic infaunal species such as bivalves, crustaceans, polychaetes, and annelids, that burrow into the existing sediment would not be able to do so into an engineered backfill. (As discussed below, DA/BA staff believe that a rocky substrate will attract starfish, a shellfish predator.) For Mr. Garrett to suggest an inevitable return to the existing conditions is just not appropriate.

Islander East's consultants acknowledge that substrate modifications can have significant habitat impacts. In the 2002 Impact Analysis Report at 36, TRC discussed potential impacts to essential fish habitat from the originally proposed native material backfill and offered that pipeline construction "will not result in a permanent loss of substrate. Following the temporary disturbances of construction, the project is not expected to convert existing soft-bottom substrate types to hard substrate types or vice versa."

Obviously, this statement is no longer applicable and the habitat WILL change. This confusion results from Islander East proposing a modified construction methodology subsequent to both the FERC FEIS review and the original WQC application to the Department.

The Department has no reason to doubt that, under perfect circumstances, *in the native substrate,* benthic organisms would eventually recover. The three to five year recovery predictions offered in the above-referenced scientific studies are generally based on observations of benthic community succession following dredging or other disturbances such as storm events which redeposits naturally-occurring sediment which is not the case with the activity proposed by Islander East. The habitat needs to recover before the benthic organisms can recolonize the area. The FEIS at 3-70 acknowledges this. Although the following citations refer specifically to shellfish recovery in relation to harvesting, they emphasize that the primary factor in recovery time is first obtaining habitat suitability:

> "The recovery of disruption of shellfish lease areas could result in a long-term impact. Once construction is complete, recruitment by larval stages of affected shellfish species (i.e., primarily hard clams) from adjacent communities would take place during the next spawning period. However, the disturbed sediment would require time to reconsolidate to provide adequate shellfish habitat. Once the sediment provides suitable habitat, recovery of shellfish beds would take at least 3 to 5 years which is the time it takes for a settled clam or oyster to reach marketable size

(Stanley and Dewitt, 1983). As evidence for this long term impact, the State of Connecticut, Department of Agriculture, Bureau of Aquaculture indicated that there are still unproductive areas in nearby shellfish habitat that was impacted by a pipeline construction project that occurred over ten years ago (Volk, 2002). Therefore some long-term impacts to the shellfish lease areas can be expected from construction of the pipeline. Islander East proposes to seed disturbed shellfish habitat with juvenile clams, which may reduce the recovery time. Nevertheless, based on observed impacts form prior construction activities *through similar habitat,* some portions of shellfish habitat may remain unproductive for many years due to trenching activities." (FEIS at 3-70)

And, in a discussion on "Anchor Placement and Cable Sweep Impacts On Shellfish Habitat," the FEIS at 3-71 specifically notes:

"Due to the weight of the anchor and the depth of the scar, the impact on shellfish likely would be complete mortality within the footprint of the scar. As previously mentioned, recovery of anchor scars depend on the local conditions and may occur within a year or would take several years. Recovery of shellfish resources would depend on the rate of natural sedimentation to fill the scar. Once the scar was filled and the sediment provided adequate habitat shellfish could be expected to take 3 to 5 years to reach marketable size. However, if the anchor pits did not refill adequately, they might persist as depressions, accumulate fine grained materials and organics, develop poor water quality and different

> benthic communities than the original, and would not be suitable shellfish habitat. This would represent a long-term conversion of shellfish habitat."

There are numerous variables to be considered in habitat recovery and species colonization following large-scale disturbances such as that proposed by pipeline installation. To the Department's knowledge, there are no studies available that offer predictions on benthic colonization in an entirely new, and very different material than the native substrate. There is certainly no evidence in the record to help the Department assess the changes that will likely occur in the existing species composition by creating a new habitat. Islander East's own consultant, Dr. Zajac, noted in a memo[80] to Paul Martin at TRC:

> "The potential impacts of alternative pipeline dredging and sediment removal scenarios discussed here do not take into account the disposal of the sediment, which is assumed to be off site, nor habitat changes / benthic organism impacts associated with filling in of the trench after the pipeline [in is] place. These also need to be considered in order to get a full and integrated assessment of the alternative construction scenarios."

The only evidence in the record about colonization of a rocky substrate is that predators of shellfish will colonize the area. (See below for further discussion.)

In regards to benthic community response to infrequent severe events, Dr. Pellegrino's Community Structure Survey concludes:

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[80] DEP R. 60, Appendix J, attached hereto.

> "The structure of benthic communities is usually controlled by infrequent severe events (disturbances) that disrupt the community and return the successional process to an earlier stage. Disturbances can be physical, biotic, or chemical in nature and may have multiple direct and indirect impacts on community structure. The recovery process in soft-sediment communities is characterized by a succession of community types, usually beginning with the appearance of opportunistic species (Stage I) and progressing to the establishment of high order (Stage III) successional assemblages (Lenihan and Micheli, 2001)."

The Department generally concurs with Dr. Pellegrino's assessment. Natural disturbances do occur at some predictable frequency and natural communities have evolved mechanisms to deal with these stressors. However, comparing regularly occurring storm events to the pipeline installation is not reasonable. While storm damage can be particularly harmful to existing benthic communities by causing mass movement of native sediments capable of damaging shellfish, particularly oysters, the habitat typically remains in tact after the storm event. The Department is aware of instances where federal crop-disaster relief funds where made available for aquaculture following severe storm events. The Department notes that while Dr. Pellegrino's conclusion regarding community succession may be applicable to minor sedimentation impacts, it is not appropriate to conclude that a benthic community will have such a response to the wholesale replacement of an existing habitat with engineered backfill. As Dr. Pellegrino noted, the predicted recovery process is for soft sediment communities and his opinion is not applicable

to the Islander East project where hard substrate will be replaced.

There is no doubt that new habitat would be created with the placement of 5½ acres of engineered backfill; old habitat would not recover. As previously noted throughout this Decision and referenced by Islander East's consultants, the fine-grained sediments in the region of the proposed pipeline are fairly homogenous and tend to be plastic and cohesive. At a March 4, 2003 technical meeting with the agencies, Islander East suggested a backfill of rock obtained from nearby Tilcon. John Volk (DA/BA) encouraged consideration of a backfill that would not attract shellfish predators (the Tilcon rock would attract starfish, which prey upon shellfish). The March 4, 2003 meeting notes (DEP R. 58) further summarize:

> "It was also discussed that habitat modification would affect the coastal zone policy and would need to be considered in the review if Islander East is proposing to alter the existing habitat. It was indicated by George Wisker (CTDEP) and John Volk (Bureau of Aquaculture) that sand would be a better backfill material than rock but not as good as silts. The goal is to restore the clam habitat that would consist of up to a foot of silty material rather than courser material."

In correspondence dated March 14, 2003[81] from Islander East, the proposed backfill is described as "[r]ock or gravel of less than 4 inches in diameter"[82]

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[81] DEP R. 60, Attachment 8, "Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques" at 6.

[82] It has been previously noted in this Decision that this material was not that approved in Islander East's Engineered

and it would have "value as hard substrate for attachment of organisms and plants, which could promote habitat diversity . . . In time, the rock backfill area along the length of the pipeline trench will become a mosaic of several substrate type combinations." The Department agrees that both the habitat type and the resulting biological integrity of this area would be changed.[83]

Shellfish Harvesting Impacts From Installation

As discussed above, the proposed 5½ acres of backfill will change existing shellfish habitat. This direct habitat conversion, in addition to the direct bottom disturbances, as defined earlier in this Decision, will destroy shellfish beds and preclude both existing and future shellfish harvesting[84] for an extended and unidentified period of time. Based on similar impacts in Connecticut, this preclusion of harvesting activity may be as long as 30 years based on scarring im-

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Backfill Plan which recommended cobble of 2 inches or less. Nevertheless, either backfill would be considered a new habitat type.

[83] Even without the addition of engineered backfill, the Milford Iroquois installation changed existing hard bottom oyster habitat into soft bottom clam habitat because of sedimentation most likely resulting from a combination of equipment disturbance on the bottom and a major storm event. Please see the Shellfish Harvesting Impacts section for a further discussion of this habitat conversion.

[84] Shellfish habitat and shellfish beds are not interchangeable terms. This terminology is confusing in the record because shellfish recovery discussions include phrases such as "commercially valuable" and "marketable size." While shellfish may eventually inhabit the new substrate and recolonize the disturbed areas after an unspecified period of time, shellfish harvesting will not be possible because of the backfill and associated equipment related bottom disturbances.

pacts. Of the 4,045 acres calculated in the Anchor Sweep Impact section of this Decision, the Department finds that approximately 1,120 of those acres are in existing and potential shellfish lease bed areas. Since commercial shellfish harvesting is conducted in water depths to a maximum of—50 feet, the 2,400 foot wide anchor corridor was multiplied by that area below the—50 foot contour. Please refer to Figure 13 for reference. For the reasons outlined below, the Department believes that these 1,120 acres in the anchor corridor will be eliminated from shellfish harvesting.

Shellfish beds are equivalent to farm fields that have been smoothed and plowed for harvesting. The substrate disturbance created by the anchor strikes, cable sweep, plowing and mounding within this corridor would create significant topographic irregularities and scars (DEP R. 41, 45 and 124). Please refer to Figure 12 in the Anchor Sweep Impacts section of this Decision. As stated on page 7 of the Department's July 29, 2003 WQC denial, "Even in the unlikely event that the bottom could eventually reestablish its former grade and habitat value, shellfishermen would most likely avoid the area for fear of damaging or losing gear thereby exacerbating the adverse impacts on use of this area for water-dependent shellfishing activities resulting form Islander East's alignment at this location."

Similar to the fact that is not possible to recreate prime upland farm soils once lost to erosion, it is not possible to recreate benthic substrate that was created by the compression of a mile-thick glacier and the accumulation of compressed silt over thousands of years. The Department does not doubt that after an unspecified period of time, some shellfish may

recolonize this disturbed sediment. Certain species (most likely oysters) would be able to colonize on the new 5½ acres of hard gravel bottom. However, because of the craters, mounds, moguls and abrupt substrate changes on the seafloor, shellfish harvesting could not occur in these areas. As previously discussed in the Existing Use section of this Decision, the harvesting equipment used in this area of Long Island Sound is not large. Critical to a "perfect" clam dredge tow is achieving the proper balance between teeth, manifold angle, water pressure for the type of bottom, boat speed, line length and current flow. Factors influencing an oyster dredge tow include current, substrate, boat speed and maintenance of a 45 degree angle on the tooth bar. An uneven surface or abrupt change in sediment type will create problems with the tow. The front of the dredge may sink into a pit and possibly hang—up on the depression wall or the baskets may fill with sediment. Since some of the baskets have holes approximately one inch wide, dredging through an area of bank-run gravel up to 2 inches in diameter will result in a basket full of gravel. Shellfish harvesters will avoid these areas because of gear complications resulting in the inefficient and unsafe operation and handling of harvesting equipment. The Department is aware that this situation has occurred in the shellfish beds in the vicinity of the Milford Iroquois installation. While the beds along the pipeline route are still harvested, the shellfishermen avoid the impacted areas and only use those portions of the lease bed that are not within the previous anchor corridor.

Another result of the Milford Iroquois installation was the conversion of bottom habitat from a hard substrate suitable for oysters to a soft sediment suitable for clams. This habitat change resulted from a

combination of equipment disturbance on the bottom and a major storm event. A severe storm on March 23, 1991 partially filled an open trench and dispersed mounded sediment up to 3,280 feet from the trench. Suspended sediment in the water column remained elevated during the four days including and just after the storm event with a mass approximately 65% higher than that suspended during normal dredging operations (DEP R. 113). As a result of this habitat conversion, former oyster lease bed areas are now used for clamming.

Islander East has offered compensation to the shellfishermen that may be impacted by the proposed pipeline installation. The FERC FEIS at 3-105 explains "Islander East has been negotiating with shellfish bed leaseholders regarding crossing agreements to compensate the leaseholders for potential damage to their business and shellfish that they own, similar to payments made to farmers for crop damages."[85] However, this economic compensation does not mitigate resource damage, nor can it restore the shellfish beds to their former condition once the substrate has been scarred by the pipeline installation. Thus, any financial compensation to individual shellfishermen or leaseholders is not relevant to the project's consistency with the Water Quality Standards.

Outstanding Application Issues

As previously noted throughout this Decision, the Department finds numerous sections of the Islander East application inadequate. Of the missing items listed below, the absence of geological survey data is

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[85] This analogy is not appropriate as the shellfish beds will be damaged for an undefined period of time.

the most significant to the Department's most recent water quality certification review. Based on the Department's experiences, the other items have significant water quality implications and should be addressed in a thorough and inclusive water quality certification application.

Incomplete Geological Survey Data

OSI's Marine Geophysical Survey recommended additional probing and coring to determine geological conditions along the proposed pipeline route. To date, Islander East has yet to provide the results collected from pre-construction geotechnical surveys. This information is necessary for the Department to conduct an accidental release assessment and identify the most vulnerable areas within the proposed HDD drill path.

HDD Failure Alternative

It is noted in the FEIS that HDD should be feasible at the Connecticut landfall based on preliminary geologic testing. The FEIS at 3-36 also notes:

> "Once begun, an HDD can fail for various reasons, including failure to complete the pilot hole, inability to maintain a stable open hole, loss of the hole opening tool because it becomes lodged or twists off, inability to pull the pipe back through the hole, or loss of the drill head due to obstacles encountered that push the drill out of alignment during drilling."

In the event of HDD failure, Islander East has identified an alternative for the Long Island landfall which is dredge trenching (FEIS 2-41) through the shallow waters to shore. In correspondence dated May 5, 2003 (DEP R. 78 at 5), the Department asked

Islander East for project alternatives in the event that HDD was unsuccessful at the Connecticut landfall. Islander East's response was provided in DEP R. 84 at 14-2: "In the event that Islander East determines that an alternate location or new installation technique must be utilized for the nearshore crossing, Islander East will seek all required regulatory approvals." No alternatives were discussed.

Recognizing the importance of having an acceptable alternative plan, FERC at 3-53, recommended the following:

> "In the event that the directional drill is unsuccessful, Islander East should file with the CT DEP and the Secretary a plan for the crossing of the Connecticut shore. This should be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. Islander East should file this plan concurrent with its application to the COE for a permit to construct using this plan. The Director of OEP must review and approve this plan in writing before construction of the crossing."

As explained in DEP R. 78 at 5, the Department requested that Islander East identify and provide necessary information regarding alternate locations and installation techniques so that conditional authorization could be granted in the case of HDD failure. If conditional locations and techniques are not approved up-front, significant delays or total project termination could result.

With no alternatives presented to the Department, it is reasonable to assume that Islander East would use the same alternative as that proposed for Long Island—dredge trenching. If this assumption is accu-

rate, the installation technology would be the same as that utilized in the Milford Iroquois project. Refer to DEP R. 120 for video footage of the Milford Iroquois installation. It is also reasonable for the Department to assume that the fate of the Branford shellfish beds would be the same as those shellfish beds impacted by the, Milford Iroquois pipeline installation. Employment of dredge trenching would be catastrophic to the nearshore shellfishery since these are existing, worked shellfish beds. Trenching would go directly through shellfish beds under the jurisdiction of the Town of Branford Shellfish Commission. Please refer to Figure 20 showing this potential trench area. A trench width of 100 feet is shown to accommodate the draft of the laybarge. The Department believes that this width is both conservative and reasonable to provide an impact estimate.

Additionally, trenching through this area would temporarily impede navigation into Tilcon's commercial quarry operation. Obviously, no discussions have occurred regarding the burial depth or type of pipeline cover for this assumed alternative. A shallow burial depth would expose the pipeline to damage from anchors belonging to heavy rock-laden barges which regularly travel to and from the Tilcon site.

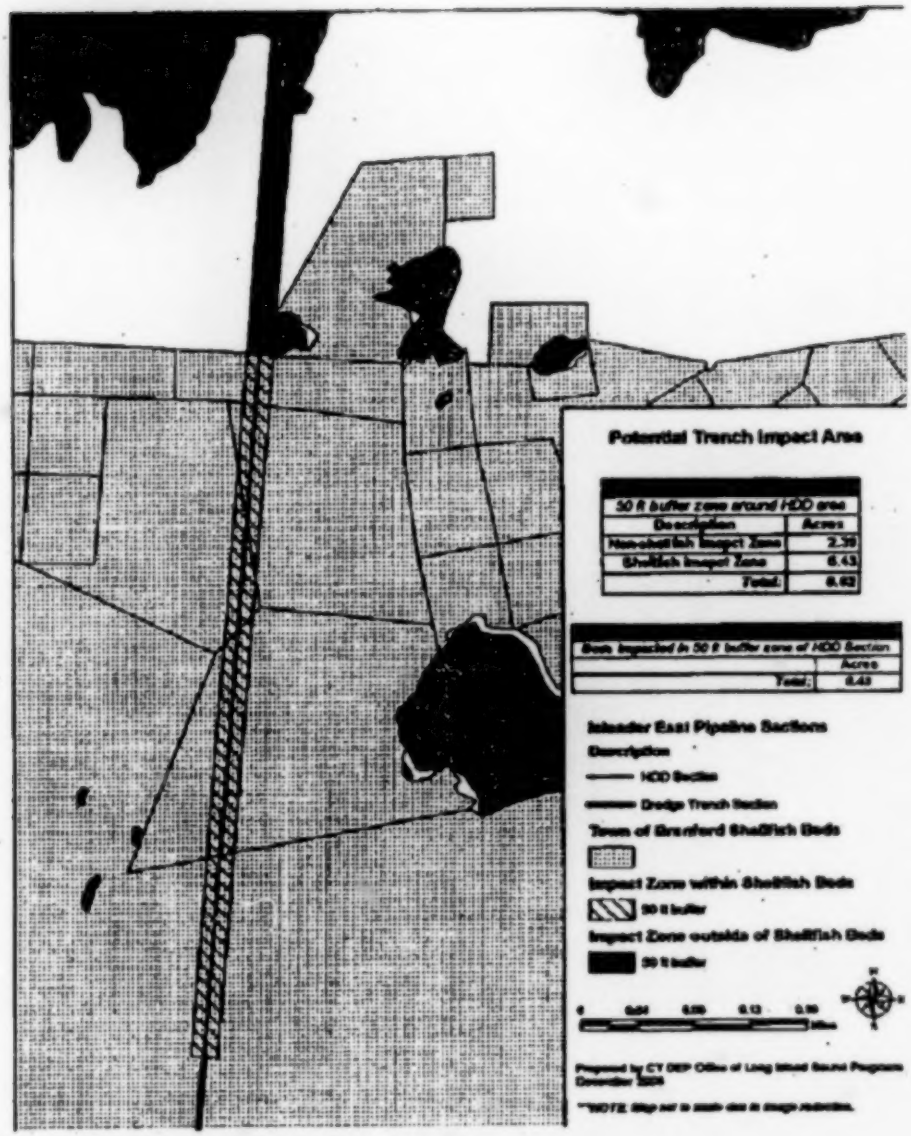

Figure 20. Potential trench impact area.

Advanced HDD Technology

The Department knows of a number of advanced, alternative HDD technologies that Islander East has neither proposed nor discussed. The use of these technologies could potentially minimize impacts to water quality by eliminating the risk of frac-outs; eliminate the need for a trench and engineered back

fill; and reduce the need for an anchor corridor through shellfish lease beds. These technologies not considered by the applicant include, but are not limited to:

- HDD conducted up to distances of more than 20,000 linear feet;
- two-drill intersections successful up to distances of approximately 10,000 linear feet;
- advanced pressure-monitoring equipment that can predict frac-outs before they occur;
- a foam substitute for drilling mud; and
- the use of magma fiber to prevent frac-outs.

Based on the record, these emerging, yet proven technologies have not been investigated by Islander East. The Department strongly feels that the use of all, or at least some of these technologies could greatly minimize the risk of nearshore impacts by preventing frac-outs and/or eliminating the proposed mile long trench with engineered backfill.

Ocean Dumping Act

As previously discussed in this Decision, the proposed dredging volumes for the exit pit and mile long trench will be between 19,300 and 28,300 cubic yards of sediment.[86] The final volume will be determined on-site during installation operations depending on a stable angle of repose for the trench edges. Islander East has proposed an acceptable disposal option for 24,000 cubic yards of this material.

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[86] This volume does not include dredging proposed on the Long Island shore approach. Any dredge material from New York should be included in the final dredge volume estimate.

The Marine Protection, Research and Sanctuaries Act (MPRSA 33 U.S.C. Sec. 1401 et seq., commonly referred to as the Ocean Dumping Act), as amended, specifically requires that all projects disposing of 25,000 cubic yards or greater must be evaluated to determine the potential environmental impact of such activities and must be authorized by the Corps. This authorization is subject to U.S. Environmental Protection Agency review and concurrence. Environmental evaluations must be conducted in accordance with the requirements and criteria promulgated in Title 40, Code of Federal Regulations, Parts 220-228 (40 CFR 220-228).

With no other viable options presented for the material in excess of 24,000 cubic yards, the dredge operator would presumably have to terminate operations upon reaching 24,000 cubic yards and Islander East would need to apply to the Department, EPA and the Army Corps of Engineers for authorization pursuant to the Ocean Dumping Act. As was discussed in the HDD Failure Alternative section, above, if conditional options are not approved upfront, significant delays or total project termination could result. The lack of authorization for dredge disposal options over 25,000 cubic yards is significant in the consideration of a water quality certification because the volume of sediment to be moved contributes to the amount of turbidity in the water column and the resulting sedimentation. More important, it is essential that the material be subject to specific biological assessments in order to sufficiently characterize the potential impacts to benthic organisms.

Drilling Fluid Containment Options

Because Islander has not established its proposed methodology, the Department has been unable to

evaluate impacts associated with the installation of a hypothetical drilling fluid containment system as discussed in DP R. 7 Appendix A, "Concepts for Subsea Containment of Drilling Fluid." The successful implementation of such a system could alleviate a portion of the impacts associated with the release of drilling fluid in sensitive nearshore shellfish beds. More information on this subject is necessary for the Department to assess impacts and predict the likelihood of drilling fluid containment success.

Pipeline Burial Obstructions

The Islander East application does not provide alternative methods of installation where those currently proposed may fail. While the shallow subsurface surveys included in the application material indicate that there should be no problems with achieving the proposed burial depths, these surveys provide only a minimal level of detail. Previously undetected boulders and bedrock outcrops or other unanticipated obstructions may present a challenge to the proposed installation methodologies. The Department notes that during the 2002 installation of the Cross Sound Cable from New Haven, Connecticut to Shoreham, New York, several unexpected and unknown installation obstacles were encountered. Alternative installation methods required the use of different technologies and the need for additional authorizations. If conditional installation techniques are not considered up-front, significant delays could result as additional water quality certifications may be necessary.

FERC Approval of Modifications

The Department is concerned that FERC has not yet reviewed the modifications proposed by Islander

East. It is the Department's understanding that Islander East will need to file an Implementation Plan with FERC that will require review and written approval. To date, no such approval has been forwarded to the Department. The Department is concerned with the absence of a FERC-approved Implementation Plan because if such plan is not approved, the applicant may have to consider alternate methodologies resulting in additional authorizations from this Department.

Connecticut Water Quality Standards and the Anti-Degradation Policy

EPA regulations require states to adopt an anti-degradation policy in their Water Quality Standards (40 C.F.R. §131.12). This policy directs that existing uses must be protected without exception and levels of water quality necessary to protect those uses be maintained. Connecticut's WQS contain such an anti-degradation policy. WQS Standard No. 2 reflects that policy, requiring that existing and designated uses "such as propagation of fish and shellfish, and wildlife" be "maintained and protected."

The classification for the waters at issue in this case is SB/SA, which "signifies that the water quality management goal is to achieve and maintain full support of all Class SA designated uses." Class SA waters are designated for the following uses: "habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation." The existing high water quality conditions overlaying an area of fine-grained cohesive sediments currently supports extensive shellfish harvesting. This activity, which has been on-going for many years, establishes "shellfish harvesting" as an existing use for these wa-

ters. The stated objective of the Clean Water Act is to restore and maintain the physical, chemical and biological integrity of the nation's water. These matters represent the core of water quality management. The Act specifies that "it is the policy of the Congress to recognize, preserve and protect the primary responsibilities and rights of States to prevent, reduce and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources . . ." (33 U.S.C. § 1251(b)). Thus an important function of a state's water law is to designate water uses and take necessary steps to achieve and maintain the water quality conditions, habitat characteristics and level of biological integrity that is necessary to sustain those uses for future generations. Further, the antidegradation policy establishes an absolute prohibition on any action that would result in the loss of an existing use.

The Department has provided a thorough discussion of the Record items concluding that the existing habitat will be permanently altered, thus impacting the biological integrity of the region. The Connecticut Water Quality Standards define biological integrity as "the ability of any aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitats of a region" (DEP R. 112, Appendix A, A-2). As noted, it is the State's goal to maintain the chemical, physical and biological integrity of surface waters.

Conclusion

In accordance with the foregoing discussion, the Department finds that Islander East's proposal to

construct and install a natural gas pipeline through the Thimble Islands region of Branford's coastal waters is inconsistent with the State of Connecticut's Water Quality Standards as approved by the EPA. Specifically, the project is inconsistent with Surface Water Quality Standards Numbers 1 and 2:

1. It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved.

2. Existing and designated uses such as propagation of fish, shellfish, and wildlife, recreation, public water supply, agriculture, Industrial use and navigation, and the water necessary for their protection is to be maintained and protected.

The Department's finding is consistent with the antidegradation provisions of Connecticut's Water Quality Standards as follows:

1. The project will result in an unacceptable impact to benthic habitats as a direct result of excavation and indirectly through sedimentation;

2. The biological integrity of the project area will be unacceptably reduced and changed as a result of the change in benthic substrate, including sedimentation and backfill with nonnative material;

3. The project will result in the loss of an existing use, shellfish harvesting, over an unacceptably large area, approximately 588 acres

(and eliminating an additional 531 acres of submerged land from potential shellfish harvesting); and

4. The potential for this project to result in unacceptable degradation of Water Quality Standards is too great (high risk of drilling mud release) and remediation, should degradation occur, is uncertain.

Islander East failed to provide evidence supporting their claim that the habitat disturbed or modified through the proposed work would be capable of recovery, while the Department has found that similar activities conducted elsewhere have had little recovery success even after long post-construction timeframes. Islander East provided many documents that identified or catalogued the existing environmental conditions in the project area. However, Islander East's application provided very little, if any, data relating to benthic recovery periods vis-a-vis the currently proposed project methodologies. It is the applicant's responsibility to provide the Department with the information necessary to fully evaluate the proposal, and the applicant has failed to meet that burden.[87]

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[87] Section 22a-3a-6(f) of the Regulations on Connecticut State Agencies: "Unless otherwise provided by law, in a proceeding on an order to enforce a statute, regulation or license and in a proceeding on a notice to revoke, suspend or modify a license, the Staff and other proponents of the order or notice shall have, the burden of going forward with evidence and the burden of persuasion. In a proceeding on an application, the applicant and other proponents of the application shall have the burden of going forward with evidence and the burden of persuasion with respect to each issue which the Commissioner is required by law to consider in deciding whether to grant or deny the application.

The record reveals that the existing environmental conditions in the area of the project dictated the development of the Islander East's proposal. Specifically, the water current velocities, soil characteristics and shallow water depths in the area each played a critical part in the development of Islander East's final proposal. The current velocities through this shallow nearshore area prevent Islander East from stockpiling or mounding the native sediment along the dredged trench as such material would likely become suspended and migrate into the water column. Because of the sediment's characteristics, it cannot be stored offsite or reused as backfill in the trench or exit pit. Therefore, Islander East determined that only engineered backfill would work in replacing the soil moved off site. Because of the current velocities, the engineered backfill would have to be much coarser, or more substantial in size, than the existing fine clay sediment, as recommended by Haley & Aldrich's May 2003 report. In order for the engineered backfill to be erosion resistant, the material placed in the dredge trench must be the size of bank-run gravel to replicate the erosion-resistance exhibited by the undisturbed sediments. Removing the existing sediment off site and replacing it with engineered backfill in the form of bank-run gravel would create an entirely new habitat type. The existing substrate is composed of a fine-grained cohesive plastic compact clay while the proposed 5½ acres of backfill would be bank-run gravel. Islander East provided no documentation of possible benthic colonization of this new substrate. The use of the word "recovery" for the area where the engineered backfill is proposed is

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Each factual issue in controversy shall be determined upon a preponderance of the evidence."

inappropriate, as the Department would not expect a return to the previous assemblage of benthic infauna or epifauna considering it would be an entirely new habitat type. Further, the record demonstrates that this new substrate type would become an obstacle to the existing water-dependent use of shellfish harvesting.

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APPENDIX C

UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

Docket No. 05–4139–ag

August Term, 2005
(Argued January 4, 2006,
Reargued April 11, 2006,
Decided October 5, 2006)

ISLANDER EAST PIPELINE COMPANY, LLC,
Petitioner,

v.

STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,
Respondent.

Before: KEARSE and RAGGI, *Circuit Judges*, and RESTANI,* *Judge*.

Petitioner Islander East Company, LLC seeks review of an order of the State of Connecticut Department of Environmental Protection denying the Petitioner's Water Quality Certificate application.

Remanded.

Judge KEARSE dissents in a separate opinion.

FREDERICK M. LOWTHER (Beth L. Webb, Janet M. Robins, on the brief), Dickstein Shapiro Morin &

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* The Honorable Jane A. Restani, *Chief Judge* of the United States Court of International Trade, sitting by designation.

Oshinsky LLP, Washington, D.C.; Anthony M. Fitzgerald, Carmody & Torrance, LLP, New Haven, CT; Thomas L. Stanton, Associate General Counsel, Duke Energy Islander East Pipeline Company, LLC as Operator for Islander East Pipeline Company, LLC; Walter Dellinger (Jonathan D. Hacker, Nicole A. Saharsky, on the brief), O'Melveny & Myers LLP, Washington, D.C., for Petitioner.

RICHARD BLUMENTHAL, Attorney General, State of Connecticut (Kimberly P. Massicotte, David H. Wrinn, Assistant Attorneys General, on the brief), Office of the Attorney General, Hartford, CT, for Respondent.

Restani, *Judge*:

Petitioner Islander East Company, LLC (Islander East) is a natural gas company, formed under the laws of Delaware, with its principal place of business in Houston, Texas. Petitioner seeks to construct an interstate natural gas pipeline, originating in North Haven, Connecticut, and crossing the Long Island Sound to terminate in Brookhaven, Long Island. In furtherance of this project, Petitioner asks the Court to review an order of the State of Connecticut Department of Environmental Protection (CTDEP) denying Petitioner's application for a Water Quality Certificate (WQC) for discharge into the waters of the Long Island Sound. Although we review such an agency denial deferentially, in this case, it appears that the challenged agency decision was arbitrary and capricious because the CTDEP (1) failed adequately to explain or support its denial with record evidence, (2) did not acknowledge or explain contradictory record evidence, and (3) neglected to consider important aspects of the problem. Accordingly, we

remand to the agency for further proceedings consistent with this opinion.

BACKGROUND

This case involves a petition to review a state agency determination pursuant to a recent amendment to the Natural Gas Act of 1938 (NGA), 15 U.S.C. § 717 (2000). The Energy Policy Act of 2005 (EPACT), Pub. L. No. 109-58, § 313(b), 119 Stat. 594, 689-90 (2005), in part amended section 19 of the NGA to provide an expedited direct cause of action in the federal appellate courts to challenge a state administrative agency's order, action, or failure to act with respect to a permit application required under federal law in order to proceed with a natural gas facility project subject to section 5 or 7 of the NGA.[1] *See* 15 U.S.C. § 717r(d) (West Supp. 2006). Our consideration of section 19(d) of the NGA is a matter of first impression in this circuit.

A. Statutory and Regulatory Scheme

The NGA provides comprehensive federal regulation for the transportation or sale of natural gas in interstate commerce. 15 U.S.C. § 717(b); *see also Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 300–01 (1988). Natural gas companies are subject to the exclusive jurisdiction of the Federal Energy Regulatory Commission (FERC). 42 U.S.C. §7172(a)(1). Pursuant to section 7 of the NGA, a

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[1] Prior to the EPACT's amendment to section 19, an NGA applicant only had recourse to challenge a state's denial of a WQC via the state's own review procedures. In this case, Islander East filed an action in Connecticut Superior Court to challenge the CTDEP's denial prior to the enactment of the EPACT, which is currently pending. *See Islander East Pipeline Co., LLC v. Envtl. Prot. Comm'r*, No. HHD-CV-04-4022253-S.

natural gas company must obtain from the FERC a "certificate of public convenience and necessity" before it constructs, extends, acquires, or operates any facility for the transportation or sale of natural gas in interstate commerce. 15 U.S.C. § 717f(c)(1)(A). The FERC is required to issue such a certificate if it finds the company "is able and willing" to comply with the federal regulatory scheme and the proposed project "is or will be required by the present or future public convenience and necessity," but the FERC may attach "to the issuance of the certificate . . . such reasonable terms and conditions as the public convenience and necessity may require." *Id.* § 717f(e).

In conjunction with the FERC's review of a natural gas project application, it must ensure that the project complies with the requirements of all relevant federal laws, including the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370f,[2] the Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451-1465,[3] and the Clean Water Act (CWA), 33 U.S.C. §§ 1251-1387.[4] See Islander East Pipeline Co.,

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[2] The NEPA requires the FERC to prepare an Environmental Impact Statement prior to taking "major Federal actions" that significantly affect the quality of the human environment. 42 U.S.C. § 4332(2)(C).

[3] The CZMA requires that "any applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone, affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program." 16 U.S.C. § 1456(c)(3)(A).

[4] Pursuant to section 401 of the CWA, "[a]ny applicant for a Federal license or permit to conduct any activity . . . which may

102 F.E.R.C. ¶ 61,054, at 61,130 (2003) (order on rehearing) (stating that "[w]hile state and local permits are preempted under the NGA, state authorizations required under federal law are not").

The EPACT amended section 19 of the NGA to provide natural gas companies with a cause of action in federal court to challenge an agency's order, action, or failure to act with respect to permits necessary for the construction or operation of natural gas projects. Specifically, if an agency denies a permit,

> [t]he United States Court of Appeals for the circuit in which a facility subject to section 717b of this title or section 717f of this title is proposed to be constructed, expanded, or operated shall have original and exclusive jurisdiction over any civil action for the review of an order or action of a Federal agency (other than the Commission) or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit, license, concurrence, or approval (hereinafter collectively referred to as "permit") required under Federal law, other than the Coastal Zone Management Act of 1972.

15 U.S.C. § 717r(d)(1) (citation omitted). If the Court finds that the order or action (1) is inconsistent with

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result in any discharge into the navigable waters," is required to "provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title." 33 U.S.C. § 1341(a)(1). State certification is deemed waived if a state refuses or fails to act on a request for certification within one year of such request. *Id.*

the federal law governing the permit, and (2) would prevent the construction, expansion, or operation of the proposed natural gas facility, "the Court shall remand the proceeding to the agency to take appropriate action consistent with the order of the Court." 15 U.S.C. § 717r(d)(3). Further, the statute provides expedited review over such an order, action, or failure to act. See 15 U.S.C. § 717r(d)(5).

The limited legislative history accompanying the EPACT indicates that Congress enacted section 19(d) because applicants, like Islander East, were encountering difficulty proceeding with natural gas projects that depended on obtaining state agency permits. See Reg'l Energy Reliability & Sec.: DOE Auth. to Energize the Cross Sound Cable: Hearing Before the H. Subcomm. on Energy & Air Quality, 108th Cong. 8 (2004) (statement of Rep. Barton) (discussing an earlier version of the EPACT, and explaining that "the comprehensive energy bill requires States to make a decision one way or another, and removes the appeal of that decision to Federal court," which "will help get projects, like the Islander East natural gas pipeline, constructed"); Natural Gas Symposium: Symposium Before the S. Comm. on Energy & Natural Res., 109th Cong. 41 (2005) (statement of Mark Robinson, Director, Office of Energy Projects, FERC) (observing that, prior to the enactment of the EPACT, NGA applicants were subject to "a series of sequential administrative and State court and Federal court appeals that [could] kill a project with a death by a thousand cuts just in terms of the time frames associated with going through all those appeal processes").

B. Islander East's NGA Application

On June 15, 2001, Islander East filed an application with the FERC under section 7(c) of the NGA for a certificate of public convenience and necessity to construct, own, and operate a new interstate pipeline to transport gas in Connecticut and New York. See Islander East Pipeline Co., 97 F.E.R.C. ¶ 61,363, at 62,685 (2001). In pertinent part, Islander East proposed to construct: (1) approximately 44.8 miles of 24-inch pipeline from an interconnection with an existing pipeline near North Haven, Connecticut, across the Long Island Sound to Brookhaven, New York on Long Island; and (2) approximately 5.6 miles of 24-inch pipeline from the proposed Islander East mainline near Wading River, New York, to a power plant in Calverton, New York. Id. Approximately 22.6 miles of the pipeline would cross the Long Island Sound, with the remaining 27.8 miles onshore. See Islander East Pipeline Co., 100 F.E.R.C. ¶ 61,276, at 62,102 (2002).

On December 21, 2001, the FERC issued a Preliminary Determination on Non-Environmental Issues relating to pipeline construction, which indicated that authorization for the construction and operation of the proposed work would be in the public convenience and necessity as required for approval under section 7(c) of the NGA. See Islander East Pipeline Co., 97 F.E.R.C. at ¶ 62,685. On August 21, 2002, the FERC issued a Final Environmental Impact Statement (FEIS), pursuant to the requirements of NEPA. Fed. Energy Regulatory Comm'n, Islander East Pipeline Project, Final Environmental Impact Statement (2002); see also Islander East Pipeline Co., 102 F.E.R.C. ¶ 61,054, at 61,113-14 (2003). The FEIS determined that one project system alternative to

Islander East's proposal would be environmentally preferable because that alternative, based on the Iroquois Pipeline's ELI Extension Project, had a shorter Long Island Sound crossing, avoided more shellfish leases, and would only have air quality and noise impacts onshore in Connecticut. See FEIS at ES-5. Nevertheless, the FEIS concluded that, if Islander East constructed the project as proposed and in accordance with the recommended mitigation measures, it would be an environmentally acceptable action. See id.

On September 19, 2002, the FERC issued a final order granting Islander East's requests for authorization to construct and operate its proposed interstate natural gas pipeline, conditioned on its compliance with various environmental requirements prior to beginning construction on the pipeline. Islander East Pipeline Co., 100 F.E.R.C. at ¶ 62,102. The FERC concluded that because the Islander East Project would be an environmentally acceptable action and because it would provide significant benefits, it was required by public convenience and necessity under the NGA. The FERC pointed out that Islander East's proposal would provide Long Island with a second source of natural gas supply, providing the benefits of pipeline-to-pipeline competition, and would provide a second facility to access natural gas supplies in the event of a problem with one of the facilities.[5] See id.

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[5] Various parties, including the Town of North Branford, the Town of Branford, and the Connecticut Attorney General, requested a rehearing. On January 17, 2003, the FERC denied those requests. *Islander East Pipeline Co.*, 102 F.E.R.C. ¶ 61,054, at 61,113 (2003).

The CTDEP and the Connecticut Attorney General filed petitions for review of the FERC's decision with the D.C.

Pursuant to the CZMA and the CWA, Islander East filed applications with the States of New York and Connecticut seeking the following state authorizations under federal law: (1) a certificate of consistency with the state's Coastal Zone Management Plan (CZMP) pursuant to section 307(c)(3)(A) of the CZMA, 16 U.S.C. § 1456(c)(3)(A); and (2) a WQC indicating consistency with the state's Water Quality Standards pursuant to section 401(a) of the CWA, 33 U.S.C. § 1341(a). In January and February 2003, New York granted both of the necessary authorizations. However, the Connecticut Department of Environmental Protection (CTDEP) denied both the CZMP[6] and WQC authorizations.

Circuit. The D.C. Circuit summarily dismissed the CTDEP's petition for lack of jurisdiction, *see Blumenthal v. FERC*, No. 03-1066, 2005 U.S. App. LEXIS 3962 (D.C. Cir. Mar. 8, 2005), and the Connecticut Attorney General voluntarily withdrew his petition.

[6] On October 15, 2002, the CTDEP rejected Islander East's CZMA application, finding that the construction impacts to the State's coastal resources would be inconsistent with its CZMP. Following a remand by the Department of Commerce (Department) to consider project changes aimed at minimizing adverse impacts, the CTDEP again found the project to be inconsistent with its CZMP. Islander East timely filed a notice of appeal with the Department, asking the Secretary of Commerce to override Connecticut's objection under the CZMA. *See* 16 U.S.C. § 1456(c)(3)(B)(iii) (allowing the Secretary of Commerce to approve licensing where the proposal is consistent with the statute or "otherwise necessary in the interest of national security").

In a fifty-page decision, the Secretary of Commerce overrode the CTDEP and granted Islander East's certification, finding the project to be consistent with the objectives of the CZMA. *See* Donald Evans, Sec'y, Dep't of Commerce, Decision & Findings of the U.S. Sec' y of Commerce in the Consistency Appeal of

Islander East filed its application to obtain WQC certification with the CTDEP on February 13, 2002. On March 13, 2003, Islander East withdrew its application and submitted a new application, which reflected modified offshore construction techniques aimed at reducing the project's environmental impacts. In brief, Islander East proposed the use of three different pipeline installation methods for the Connecticut portion of the pipeline project. First, Islander East proposed to utilize a horizontal directional drill (HDD) construction technique to initiate the pipeline installation at a point onshore in Connecticut, approximately 700 feet inland from the shoreline, that would continue until mile post (MP) 10.9. The HDD method would involve drilling a hole along the pipeline's projected path, enlarging it to accommodate the pipeline, then pulling the pipeline into the hole. The method would involve no exposure to the sea floor until the drill reached an exit point at MP 10.9.

Second, Islander East proposed to use a mechanical bucket dredge to excavate an exit basin that would serve to contain and restrict the release of drill fluid at the HDD exit point. From the exit basin, Islander East would continue to use the mechanical bucket dredge to excavate a trench to approximately MP 12. In order to reduce the impacts of sediment deposition, Islander East would place dredge spoil onto hopper barges, instead of sidecasting it onto the sea floor for later use as backfill. Next, the pipeline would be laid

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Islander East Pipeline Co., LLC (2004) (Commerce Report). Respondent appealed the Secretary's findings to the U.S. District Court for the District of Connecticut, and that action is still pending. *Connecticut v. United States Dep't of Commerce*, No. 03:04-CV-01271-SRU (D. Conn. filed July 30, 2004).

into the trench, and the trench would be covered with engineered backfill, in the form of bank-run gravel.

Finally, for the deeper waters between MP 12 and MP 32, Islander East proposed to use a vessel with a sub-sea plow and mooring system. Using this method, the towing vessel would move along the pipeline route by pulling in its bow anchor lines and releasing its stern anchor lines, while an anchor handling tug would move the anchors ahead of the towing vessel. To minimize anchoring impacts, Islander East proposed to lower the pipeline with a single pass of the sub-sea plow. Following the pass, a backfill plow would return the displaced spoil to the trench. See generally Islander East Pipeline Co., Permit Application for: 401 Water Quality Certificate, Marine Pipeline Installation Methodology 1–6 (2003) (Pipeline Installation Methodology).

On February 5, 2004, the CTDEP denied Islander East's application for a WQC, finding the proposed pipeline work to be inconsistent with the Connecticut Water Quality Standards (CTWQS). See Islander East Pipeline Co., CTDEP Denial Letter (Feb. 5, 2004) (CTDEP Denial). On April 16, 2004, Islander East filed a petition for a declaratory ruling with the CTDEP seeking to overturn the CTDEP's denial of certification, which the CTDEP deemed procedurally deficient, and on June 21, 2004, Islander East filed an action in Connecticut Superior Court challenging the CTDEP decision. *See Islander East Pipeline Co., LLC v. Envtl. Prot. Comm'r,* No. HHD-CV-04-4022253-S.

While the state proceedings were pending, EPACT was signed into law on August 8, 2005. That same day, pursuant to the newly enacted section 19(d) of the NGA, Islander East filed a petition for expedited

review of the CTDEP Denial with this Court, see Dkt. No. 05-4139, and moved to stay the Connecticut state court proceedings. Subsequently, the CTDEP moved to dismiss Islander East's petition for review in this court for lack of subject matter jurisdiction, and Islander East moved to amend its petition to add current CTDEP Commissioner Gina McCarthy as a respondent. On January 23, 2006, this court ruled that it would consider the above motions along with the merits of Islander East's petition.

DISCUSSION

Islander East brings this petition for review to contest the CTDEP's denial of its WQC application, so that it may begin construction of its FERC–approved natural gas pipeline project. Petitioner contends that the denial of its application for a WQC (1) prevents the construction of a pipeline facility subject to section 7 of the NGA, and (2) violates federal law because the pipeline facility is consistent with the CTWQS. Thus, Petitioner asks the Court to find in its favor on both the aforementioned grounds and to remand this proceeding to the CTDEP with instructions to issue the requested WQC.

As an initial matter, the CTDEP challenges the Court's subject matter jurisdiction to review this petition, contending that the Tenth and Eleventh Amendments to the United States Constitution bar Petitioner's suit against the CTDEP on the basis of state sovereignty, and arguing that Section 19(d) of EPACT may not be retroactively applied to confer jurisdiction on this court.[7] The CTDEP also asks the

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[7] In the CTDEP's supplemental submission to the Court, it argued that Islander East's suit is barred because it failed to exhaust all available state administrative remedies. Section

Court to deny Petitioner's motion to add the Commissioner as a respondent, arguing that the Ex parte Young doctrine allowing suits against state officials does not provide an exception to the State's Eleventh Amendment immunity in this case. See Ex parte Young, 209 U.S. 123 (1908). In the event that the Court reaches the merits of Petitioner's section 19(d) suit, Respondent contends that the CTDEP Denial is consistent with federal law.

I. Jurisdiction over the CTDEP and the Commissioner

A. Eleventh Amendment Immunity

The Eleventh Amendment provides that United States courts may not consider "any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State . . . ." U.S. Const. amend. XI. Although not clear from the terms of the amendment, the Supreme Court has interpreted this language to bar suit against a state by its own citizens. See Seminole Tribe of Fla. v. Florida, 517 U.S. 44, 54 (1996) (citing *Hans v. Louisiana*, 134 U.S. 1 (1890)). The Supreme Court also applies this immunity to suits against state agencies. See Pennhurst State Sch. & Hosp. v. Halderman, 465 U.S. 89, 100 (1984) (holding that "in the absence of consent a suit in which the State or one of its agencies or de-

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19(d) of the EPACT does not expressly require that state administrative remedies be exhausted before the commencement of an action under its terms, but Respondent argued that an exhaustion requirement should be implied. At oral argument, however, counsel for Respondent stated that the CTDEP would not press its exhaustion argument, as that argument was neither essential nor important to the case. Accordingly, we deem the exhaustion argument waived.

partments is named as the defendant is proscribed by the Eleventh Amendment").

Respondent argues that section 19(d) of the NGA violates the Eleventh Amendment because it permits a private company to bring suit in federal court to challenge a decision by a state agency. Respondent acknowledges two circumstances in which private citizens may sue state agencies in federal court: (1) when Congress unequivocally expresses its intent to abrogate state sovereign immunity pursuant to a valid grant of constitutional authority, see Fitzpatrick v. Bitzer, 427 U.S. 445, 456 (1976); and (2) when a State voluntarily waives its Eleventh Amendment immunity, see Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 686–87 (1999) (inferring State waiver of immunity from the State's acceptance of a "gratuity" offered by Congress conditioned on the State's willingness to be subject to suit in federal court). Respondent argues that the CTDEP is entitled to a presumption of immunity, and that neither of the above exceptions to Eleventh Amendment immunity exist here. *See id.* at 682 (stating that "'[c]ourts indulge every reasonable presumption against waiver'" of sovereign immunity (quoting Aetna Ins. Co. v. Kennedy ex rel. Bogash, 301 U.S. 389, 393 (1937))).

Islander East analogizes the Court's jurisdiction under section 19(d) of the NGA to the federal regulatory scheme established by the Telecommuni cations Act of 1996 (TCA), 47 U.S.C. §§ 151–614, and it argues that state agencies regulating pursuant to federal grants under the authority of both the NGA and the TCA thereby waive their sovereign immunity from suit. By passing the TCA, Congress "federalized the regulation of competition for local telecommuni-

cations service", but granted states a limited right to regulate, conditioned on federal court review of state regulatory decisions. *MCI Telecomm. Corp. v. Bell Atl.-Penn.*, 271 F.3d 491, 509 (3d Cir. 2001). Under the TCA, if a state chooses not to regulate, regulatory decision-making reverts back to the Federal Communications Commission. Id.; see also 33 U.S.C. § 1341(a)(1) (providing that, under the CWA, if state refuses or declines to rule on WQC application within one year, regulatory decision-making reverts back to federal authorities). The Courts of Appeals that have considered the issue have uniformly held that state agencies that regulate agreements under the TCA knowingly waive their Eleventh Amendment immunity by voluntarily accepting the power to regulate local telecommunications competition. See Bell Atl.-Penn., 271 F.3d at 512-13 ("[A] state commission that decides to participate in this statutory scheme is on notice from the outset that it will be subject to suit, brought only in federal court, by any party aggrieved by its decision."); AT&T Commc'ns v. BellSouth Telecomms. Inc., 238 F.3d 636, 645-47 (5th Cir. 2001); MCI Telecomms. Corp. v. Ill. Bell Tel. Co., 222 F.3d 323, 342–43 (7th Cir. 2000); MCI Telecomms. Corp. v. Pub. Serv. Comm'n, 216 F.3d 929, 938–39 (10th Cir. 2000). But see Bell Atl. Md., Inc. v. MCI Worldcom, Inc., 240 F.3d 279, 293–94 (4th Cir. 2001), vacated on other grounds sub nom. Verizon Md. Inc. v. Pub. Serv. Comm'n, 535 U.S. 635 (2002).[8]

As with the TCA, Congress wholly preempted and completely federalized the area of natural gas reg-

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[8] The Supreme Court declined to rule on the issue of whether a State may be deemed to have waived its Eleventh Amendment immunity by participating in a federal regulatory scheme. *Verizon*, 535 U.S. at 645.

ulation by enacting the NGA. See Schneidewind v. ANR Pipeline Co., 485 U.S. at 300–01 (describing the comprehensive federal regulatory scheme in the NGA). Congress did not, however, thereby supersede any other federal statutory requirements, such as section 401 of the CWA. Under the CWA, as described supra, at page 5 n.4, Congress provides states with the option of being deputized regulators under the authority of federal law.[9] Without suggesting that states are required to relinquish their sovereign immunity with regard to all actions they take pursuant to the CWA, Petitioner argues that section

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[9] The CWA establishes distinct roles for state and federal governments in regulating water quality. Under the CWA, each state is authorized to institute comprehensive water quality standards establishing water quality goals for all intrastate waters. 33 U.S.C. §§ 1311(b)(1)(C), 1313. The state must submit its proposed water quality standards to the Environ-mental Protection Agency for federal approval, and upon approval the state standard becomes "the water quality standard for the applicable waters of that State." 33 U.S.C. § 1313(c)(3). The CWA sets forth the following broad regulatory goals:

> to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

33 U.S.C. § 1313(c)(2)(A). Section 303 also sets forth an "anti-degradation policy," which requires that state standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation. 33 U.S.C. § 1313(d)(4)(B). The CWA allows states to impose more stringent water quality controls than are required under its terms. *See* 33 U.S.C. § 1370; 40 C.F.R. § 131.4(a) (2000) (stating that "[s]tates may develop water quality standards more stringent than required by this regulation").

19(d) of the NGA does require a waiver of state sovereign immunity with respect to state agency decisions that are appealable under the EPACT's terms. Thus, Petitioner contends that Connecticut effectively waived its Eleventh Amendment immunity by electing to participate in the regulatory scheme provided by the NGA and the CWA.

Respondent does not dispute that by accepting a role as deputized regulator under the CWA, a state agrees to waive its immunity from suit under section 19(d) of the NGA. Instead, Respondent argues that it never waived its Eleventh Amendment immunity from suit under section 19(d) because this provision was passed into law only after the CTDEP denied Islander East's WQC application. Thus, Respondent argues that Connecticut did not knowingly agree that its participation in the NGA and CWA regulatory scheme would be conditioned upon accepting federal jurisdiction over its decisions made pursuant to that scheme.

Respondent's argument is flawed by a fatal omission: Respondent does not assert that Connecticut ever withdrew its participation from the CWA and NGA regulatory scheme following the enactment of the EPACT. Thus, by going forward with its federally deputized role even after the EPACT's enactment, Connecticut has now knowingly waived its immunity from section 19(d) suit in order to receive the benefits of participating in the NGA and CWA regulatory scheme. See Lapides v. Bd. of Regents, 535 U.S. 613, 619 (2002) (noting that "more than a century ago this Court indicated that a State's voluntary appearance in federal court amounted to a waiver of its Eleventh Amendment immunity" (citing Clark v. Barnard, 108 U.S. 436, 447 (1883))); Coll.

Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. at 686–87 (noting that a state constructively waives its Eleventh Amendment immunity by accepting a gift or gratuity conditioned on said waiver).

As a case in point, the CTDEP Denial continues to prevent Islander East from proceeding with its FERC–approved natural gas pipeline project, and the CTDEP has chosen to defend its denial of Islander East's WQC application in this litigation. The principles underlying State sovereign immunity do not justify applying Connecticut's waiver solely on a prospective basis, that is, only for new CWA determinations, especially where the state's decision continues to serve as a bar to proceeding with a federally approved natural gas project. This conclusion is particularly warranted where, as in this case, after the state becomes aware that it is subject to federal jurisdiction, it continues actively to litigate in defense of its earlier decision and elects not to abdicate its deputized authority back to the federal government. See AT&T Commc'ns v. BellSouth Telecomms., *Inc.*, 238 F.3d at 645 ("[A]fter College Savings, Congress may still obtain a non-verbal voluntary waiver of a state's Eleventh Amendment immunity, if the waiver can be inferred from the state's conduct in accepting a gratuity after being given clear and unambiguous statutory notice that it was conditioned on waiver of immunity."); see also In re Charter Oak Assocs., 361 F.3d 760, 767 (2d Cir. 2004) (noting that the doctrine of "waiver by litigation" derives not from a state's "'actual preference or desire,' but rather upon 'the judicial need to avoid inconsistency, anomaly, and unfairness'" (quoting Lapides v. Bd. of Regents, 535 U.S. at 620)). Thus, we conclude that once Congress enacted section 19(d), Connecticut was on notice that its

continued participation in the NGA and CWA regulatory scheme would constitute a waiver of its Eleventh Amendment immunity with respect to all suits under section 19(d).

Accordingly, in this case, Connecticut knowingly and intelligently waived its Eleventh Amendment immunity from section 19(d) suit. Because we hold that the Eleventh Amendment does not bar Petitioner's suit against the CTDEP, it is unnecessary for us to consider Petitioner's motion to add the Commissioner as a Respondent, or to address the application of the Ex parte Young doctrine to suits under section 19(d). Therefore, Petitioner's motion to add the Commissioner is denied as moot.

B. Tenth Amendment Immunity

The Tenth Amendment prescribes that "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." U.S. Const. amend. X. Thus, in cases involving the division of authority between federal and state governments, "[i]f a power is delegated to Congress in the Constitution, the Tenth Amendment expressly disclaims any reservation of that power to the States; if a power is an attribute of state sovereignty re-served by the Tenth Amendment, it is necessarily a power the Constitution has not conferred on Con-gress." New York v. United States, 505 U.S. 144, 156 (1992).

"[W]here Congress has the authority to regulate private activity under the Commerce Clause, [the Supreme Court has] recognized Congress' power to offer States the choice of regulating that activity according to federal standards or having state law preempted by federal regulation." Id. at 167. Congress's

offer of shared regulatory authority does not run afoul of the Tenth Amendment. *See Hodel v. Va. Surface Mining & Recl. Ass'n*, 452 U.S. 264, 290 (1981) ("We fail to see why [the statute at issue] should become constitutionally suspect simply because Congress chose to allow the States a regulatory role.").

In this case, there is no question that "the Federal Government under the Commerce Clause of the Constitution (Art. I, § 8, cl. 3) has dominion, to the exclusion of the States, over navigable waters of the United States." City of Tacoma v. Taxpayers of Tacoma, 357 U.S. 320, 334 (1958). By enacting the CWA, Congress provided states with an offer of shared regulatory authority. See Arkansas v. Oklahoma, 503 U.S. 91, 101 (1992) (stating that the CWA "anticipates a partnership between the States and the Federal Government, animated by a shared objective").

Respondent does not dispute that under the CWA the Federal Government elected to maintain control over the mechanism of regulating discharges into navigable waters. Rather, Respondent argues that federal court review of a WQC decision infringes upon Connecticut's jurisdiction over its own public trust lands, i.e., the land underlying the Long Island Sound. See Idaho v. Coeur d'Alene Tribe of Idaho, 521 U.S. 261, 283 (1997) (concluding that the court order sought "would divest the State of its sovereign control over submerged lands, lands with a unique status in the law and infused with a public trust the State itself is bound to respect"); Utah Div. of State Lands v. United States, 482 U.S. 193, 195–98 (1987) (stating that lands underlying navigable waters have historically been considered "sovereign lands," and

state ownership of them is "considered an essential attribute of sovereignty").

The Supreme Court cases cited by Respondent are inapposite, and we conclude that granting Islander East's petition for review would not interfere with Connecticut's control over its sovereign lands. The Supreme Court's decisions in Coeur d'Alene and Utah Div. of State Lands involved challenges to state sovereignty over state land: in Coeur d'Alene, a private party brought an action for declaratory and injunctive relief against the State claiming ownership of various submerged lands, 521 U.S. at 261, while in Utah Div. of State Lands, the State brought an action for declaratory and injunctive relief contending that it was the owner of a lake bed, 482 U.S. at 200. Here, the grant or denial of a WQC does not involve an issue of land ownership. Islander East's authorization to exercise the power of eminent domain to obtain a right of way for the natural gas pipeline unquestionably comes from the FERC in accordance with its authority under the NGA. Thus, in this case, federal court review involves no infringement of state jurisdiction over its lands. Such review, at most, intrudes upon the State's authority to determine whether the anticipated construction of Islander East's federally approved pipeline on the land at issue satisfies state water quality standards. The exercise of this authority is not a sovereign state right under the Tenth Amendment. Rather, Congress has the authority to regulate discharges into navigable waters under the Commerce Clause, and the State, in this case, exercises only such authority as has been delegated by Congress. Accordingly, there is no basis for Respondent's Tenth Amendment challenge to Islander East's petition for review.

C. Retroactivity of NGA Section 19(d)

Respondent argues that it cannot be sued under NGA section 19(d) because section 19(d) does not state that it is retroactive, and the CTDEP Denial was issued eighteen months before the statute's enactment. We disagree.

In Landgraf v. USI Film Prods., the Supreme Court held that "[e]ven absent specific legislative authorization, application of new statutes passed after the events in suit is unquestionably proper in many situations." 511 U.S. 244, 273 (1994). The Court explained that statutes applying new jurisdictional rules are typically retroactive because such statutes regulate the conduct of the courts, not the parties:

> We have regularly applied intervening statutes conferring or ousting jurisdiction, whether or not jurisdiction lay when the underlying conduct occurred or when the suit was filed. . . . Application of a new jurisdictional rule usually takes away no substantive right but simply changes the tribunal that is to hear the case. Present law normally governs in such situations because jurisdictional statutes speak to the power of the court rather than to the rights or obligations of the parties. . . . Because rules of procedure regulate secondary rather than primary conduct, the fact that a new procedural rule was instituted after the conduct giving rise to the suit does not make application of the rule. . . retroactive.

Id. at 274-75 (internal citations and quotation marks omitted); accord Hughes Aircraft Co. v. United States, 520 U.S. 939, 951 (1997).

Respondent is correct in noting that a presumption against retroactivity applies when new provisions affect contractual or property rights. See Landgraf v.

USI Film Prods., 511 U.S. at 270-71 ("The largest category of cases in which we have applied the presumption against statutory retroactivity has involved new provisions affecting contractual or property rights, matters in which predictability and stability are of prime importance."). But as discussed above in the context of Respondent's Tenth Amendment challenge, section 19(b) did not affect any of Connecticut's rights – property, contractual, or otherwise. The CTDEP's ability to issue WQCs was conferred by the federal government, which has exclusive control over navigable waterways. CTDEP therefore lacks independent rights in its WQC determinations.

Even if the CTDEP did have property or contract rights under the CWA, section 19(d) would not affect its exercise of those rights. The CTDEP is still entitled to make WQC determinations; those determinations simply are now reviewed in federal court as opposed to state court. Thus, we conclude that section 19(d) applies retroactively, and its provision of exclusive jurisdiction to this court controls this petition.

II. Merits of Petitioner's Section 19(d) Suit

A. Standard of Review

Proceeding to the merits, we first address the standard of review to be applied in reviewing an action under section 19(d) of the NGA. Section 19(d)(3) provides for a remand where the state agency action is "inconsistent with the Federal law governing such [action] and would prevent the construction, expansion, or operation of the facility subject to [the NGA]." 15 U.S.C. § 717r(d)(3). Here, there is no dispute that the CTDEP Denial is preventing the construction of the pipeline project, so the only question is whether the CTDEP Denial is inconsistent with federal law.

Although the statute does not prescribe the applicable standard of review for this question, both parties suggest that the appropriate standard is the traditional arbitrary and capricious standard for review of federal agency decisions under the Administrative Procedure Act (APA). See 5 U.S.C. § 706(2)(A).

By definition, the APA applies only to federal agency actions, see 5 U.S.C. § 551(1), however, in the context of the TCA, federal courts have used the arbitrary and capricious standard when reviewing the merits of state agency decisions made pursuant to federal law. See, e.g., Mich. Bell Tel. Co. v. MFS Intelenet of Mich., Inc., 339 F.3d 428, 433 (6th Cir. 2003); U.S. West Commc'ns, Inc. v. Sprint Commc'ns Co., 275 F.3d 1241, 1248 (10th Cir. 2002); Sw. Bell Tel. Co. v. Waller Creek Commc'ns, Inc., 221 F.3d 812, 816 (5th Cir. 2000); US West Commc'ns, Inc. v. MFS Intelenet, *Inc.*, 193 F.3d 1112, 1117 (9th Cir. 1999). Specifically, in reviewing challenges to state agency interconnection agreement rulings under a review provision in the TCA analogous to that in NGA section 19(d), see 47 U.S.C. § 252(e)(6), federal courts have adopted a two-step approach. See Mich. Bell, 339 F.3d at 433. Courts first review de novo whether the state agency complied with the requirements of the relevant federal law. See id. "If no illegality is uncovered during such a review," the court then analyzes the state agency's factual determinations "under the more deferential arbitrary-and-capricious standard of review usually accorded state administrative bodies' assessments of state law principles." Id.; see also Ace Tel. Ass'n v. Koppendrayer, 432 F.3d 876, 878 (8th Cir. 2005).

We apply the same two-step standard to NGA review. Here, there is no question that the CTDEP

complied with federal law in applying its state water quality standards to Islander East's permit application, as directed by the CWA. See 33 U.S.C. § 1341(a). Therefore, we proceed directly to an analysis of the CTDEP's factual determinations under the arbitrary and capricious standard. See 5 U.S.C. §706(2)(A).

Pursuant to the arbitrary and capricious standard, an agency must

> examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made. In reviewing that explanation, we must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. The reviewing court should not attempt itself to make up for such deficiencies; we may not supply a reasoned basis for the agency's action that the agency itself has not given. We will, however, uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned.

Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. *Ins. Co.*, 463 U.S. 29, 42–43 (1983) (internal quotation marks and citations omitted) (hereinafter State Farm). Additionally, courts may

not accept appellate counsel's post hoc rationalizations for agency action. It is well established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself. *Id.* at 50 (citation omitted).

B. The CTDEP Denial

In the instant case, the CTDEP denied Islander East's WQC application in a brief six-page letter of denial, determining that "the proposed work in the proposed location is inconsistent with the Water Quality Standards," because the project would "adversely affect water quality and prohibit the existing and designated uses of the receiving waters." CTDEP Denial at 1. The CTDEP cited three bases for its conclusion: (1) temporary water quality disturbance and habitat alteration would be inconsistent with the CTWQS, Surface Water Quality Standard No. 1;[10] (2) degradation of water quality and disruption of existing uses would be inconsistent with the anti-degradation policy set forth in the CTWQS;[11] and (3) disruption of habitat would be inconsistent with section 22a-98 of the Connecticut Coastal Management Act (CCMA). Id. at 2–5. The CTDEP explained that "[t]hese elements do not stand alone, but must be read

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[10] Surface Water Quality Standard No. 1 states:

> It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved.

CTWQS at 1.

[11] The anti-degradation policy to the CTWQS "requires the maintenance and protection of water quality in high quality waters and protection and maintenance of existing uses in all cases." CTWQS at Appx. E-1.

in such a fashion as to be internally consistent within the Water Quality Standards and consistent with the goals of the [CWA]." Id. at 2. Based on a close analysis of the CTDEP's justifications and the record, we conclude that the CTDEP did not adequately examine the relevant record evidence, and failed to articulate rational connections between the facts in the record and the bases for its decision. To explain our conclusion, we examine each of the agency's three grounds for the Denial.

1. Water Quality Impacts and Habitat Alteration

a. Findings

The CTDEP determined that the "dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping" associated with pipeline installation would cause temporary water quality disturbance, permanent change to the benthic substrate, and negative impacts to the aquatic biota, which it found inconsistent with the goal of the CTWQS to "restore or maintain the chemical, physical, and biological integrity of surface waters." CTDEP Denial at 4 & n.11.[12]

According to the CTDEP Denial, installation would cause direct disturbance to the benthic substrate (sea floor), and would result in short-term turbidity of the water column, followed by sediment deposition on the benthic substrate. *Id.* at 4. To support this conclusion, the Denial cited a study estimating that between 1 and 3 millimeters of sediment would be de-

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[12] The CTWQS define "biological integrity" as "the ability of any aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitats of a region." CTDEP Denial at 4.

posited in and around the pipeline trench area. Id. at 3 (citing Letter from John C. Roberge to Anthony J. DaRos, First Selectman, Town of Branford at 3 (Sept. 30, 2003)) (Sept. 30, 2003 Roberge Report). The Denial determined that this disturbance would "permanently change the [benthic] substrate and negatively impact the existing aquatic biota that depend on such substrate"; thus, it concluded that "[t]he combined assaults of direct habitat disturbance and temporary water quality impacts . . . [would] negatively impact the overall biological integrity of the Thimble Islands ecosystem." *Id.* at 4. Other than the Roberge Report, however, the Denial cited no studies or record evidence to support this conclusion.

Additionally, the CTDEP Denial concluded that direct habitat disturbance caused by sediment deposition would "dramatically alter natural habitats and adversely impact the existing community of organisms." *Id.* Specifically, the Denial noted that once the original seabed has been disturbed, the "high-order or late successional stage species such as clams and oysters that lived in the original substrate can no longer exist," and that instead, "early-stage opportunistic species such as polychaete worms" would populate the new habitat. Id. The CTDEP concluded that it was "uncertain whether the associated diverse assemblage of bottom dwelling organisms currently present in this area could be reestablished" because "[n]o studies exist from which one may predict a known recovery time for both these benthic communities and the substrate, if, indeed, there is any significant recovery." Id. The only record evidence to support this conclusion was a report issued by Peter E. Pellegrino entitled "Macrobenthic Community Structure Along the Proposed Islander East Pipeline Route in Long Island Sound" (Pellegrino Report), which was

cited by the CTDEP without discussion of its substance.

b. Analysis

(i) Impact on Water Quality

The record shows that the pipeline installation's impact on water quality would be short-term, and Respondent does not suggest that such a result would be inconsistent with the CTWQS. See id. at 3 (acknowledging that "[t]urbidity of the water column would be relatively short–term"); FEIS at 5-3 (stating belief that "impacts to water quality [of the Sound near the Connecticut shore] would be short-term in nature", because "elevated turbidity levels caused by sediment dispersion through the water column typically return to background levels within days of completion of backfilling," and therefore impacts on Long Island Sound water quality should last "no more than several months"); John C. Roberge, "Potential Sedimentation Impacts Which Could Result from Dredging" at 3 (2003) (Roberge Report) at 4 (noting that dredging in the Long Island Sound historically causes "suspended sediment concentrations returning to pre-project levels almost immediately following cessation of the trenching operations"); TRC Envtl. Corp., "Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques," at 6 (2003) (TRC Report) (estimating that organisms along the pipeline route would be exposed to increased turbidity at any one location for only "around 6 hours"). Thus, we do not read the CTDEP Denial to place significant reliance on the pipeline project's temporary impact on water quality.

(ii) Impact of Sediment Deposition and Direct Disturbance on Benthic Substrate and Natural Habitats

While the CTDEP acknowledged that the water quality disturbance caused by pipeline installation was not particularly problematic, it did conclude that the sediment deposition and direct benthic substrate disturbances resulting from installation would "permanently change the substrate and negatively impact the existing aquatic biota that depend on such substrate." CTDEP Denial at 4. The CTDEP cited no scientific studies or other evidence that directly supported the latter findings, and the Denial failed to acknowledge or respond to contradictory data in the record.

An analysis of the record reveals considerable evidence indicating that direct pipeline installation and accompanying sediment deposition would not have a permanent effect on the benthic environment. For example, the FEIS noted that, although "most sessile benthic organisms and demersal fish eggs in [the disturbed] area would be smothered by [sediment]," most fish and mobile benthic organisms would relocate and avoid it. FEIS at 3-64. The FEIS concluded that "recovery of most of the disturbed benthic communities along the pipeline route could be expected to occur within 2 to 5 years." Id. at 3-66; see also id. at 3-70, 3-71 (predicting the recovery of disturbed shellfish beds within "3 to 5 years").

Significantly, reports prepared for both Islander East and the Town of Branford projected similar limited impacts. The TRC Report, prepared for Islander East, concluded that,

> [c]onsidering only the maximum[] [estimates of sediment deposition], and if the predictions are

> correct, this degree of sediment deposition onto the sea floor should have little impact on sea floor habitats and communities, and may approach background/natural levels of sediment resuspension and deposition in the area.

TRC Report at 5 (quoting the opinion of Dr. Roman Zajac, an independent marine biologist consulting on the project); see also id. at 6 (concluding that "no mortality is expected and stress factors will be minimal" as a result of sediment deposition caused by pipeline installation with 1.5 feet depth of cover). Similarly, the Garrett Group Report, prepared for the town of Branford, concluded that the anticipated "bottom damage" caused by construction would "alter an existing productive shellfish habitat, and an existing invertebrate community structure," but that "[a]fter all project related activities and secondary conditions associated with the construction have ceased, the bottom will recover after several years and return to the existing condition." Garrett Group, Ltd., "Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project" at ES–2 (2003) (Garrett Report) (emphasis added); see also id. at 15. Additionally, the Pellegrino Report, cited in the Denial, explicitly discusses the "recovery process" after sediment deposition, noting that the process typically concludes with the reestablishment of high-order species. Id. at 6.

The Denial thus failed to mention that at least four scientific studies in the record concluded that the substrate was capable of a return to its existing condition—findings directly opposite to its conclusion that pipeline installation would "permanently change the substrate" and "dramatically alter natural habitats". Denial at 4. Such failure alone could be

deemed arbitrary and capricious. See State Farm, 463 U.S. at 42–43 (noting that an agency's failure to offer an "explanation for its decision that runs counter to the evidence" before it is arbitrary and capricious). Additionally, the CTDEP's conclusion that "no studies" existed from which a "known recovery time for both these benthic communities and the substrate" could be predicted, Denial at 4, was manifestly contradicted by the above studies, two of which provided specific recovery time estimates, and none of which predicted permanent alteration of the benthic substrate.[13]

The CTDEP Denial cited two studies during its analysis of the project's impact on the benthic substrate, however, neither of these studies supported its conclusion that the benthic substrate would be "permanently changed" and the surrounding natural habitats would be "dramatically alter[ed]." The Denial cited the Roberge Report simply as a source for its citation of the amount of sediment deposition that would result from pipeline installation.[14] See Denial

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[13] The dissent contends that these studies' recovery estimates were equivocal and, therefore, that the CTDEP was justified in its conclusion that no studies existed predicting a "known" recovery time. *See post* at 71–72. However, the CTDEP's failure to acknowledge the existence of the above studies, all of which suggest eventual total recovery of the benthic substrate, constitutes a "fail[ure] to consider an important aspect of the problem," which is arbitrary and capricious under our governing standard of review. *State Farm*, 463 U.S. at 43.

[14] Although the CTDEP appended the Roberge Report to its Denial, it nowhere indicated that it relied on that report for anything other than the limited cited purpose. Notably, it did not cite the Roberge Report to reject factual conclusions favorable to Islander East noted in other similarly appended reports, as our dissenting colleague suggests. The deference we accord agency decisions depends on a record showing that the

at 3. The Roberge Report does not make any predictions as to the impact of this activity on water quality, the benthic substrate, or the aquatic habitat. See Roberge Report at 17 (stating that going forward "[i]t is essential that the potential impacts upon pelagic, demersal and benthic fauna as well as subtidal flora imposed by the sedimentation processes be evaluated and quantified").[15] Indeed, any conclusions that Roberge later made as to mortality caused by sedimentation apparently were drawn from the Garrett

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agency has, in fact, examine[d] the relevant data and itself identified a rational connection between the facts found and the choice made. State Farm, 463 U.S. at 42. The mere appending of voluminous documents to a brief agency decision is insufficient to demonstrate the agency's adequate examination of the relevant data, particularly where, as in this case, (1) the facts in dispute are complex, (2) the agency fails to identify and resolve critical factual conflicts discussed in the appended documents, and (3) some circumstantial evidence suggests that the agency issued its denial despite recognition of the inadequacy of its factual analysis. See infra at 50.

[15] The dissent, like the CTDEP, implicitly assumes that mortality in the existing shellfish community will lead to "an adverse and permanent effect on the makeup of the benthic community." See post at 66-67. The Roberge Report does not make this conclusion. Roberge mentions "significant mortality within the benthic communities" that may result from pipeline installation, but makes no mention of the permanent loss of habitat claimed by CTDEP. The Roberge Report does note a significant "impact [on] the current fisheries operations," but concludes that fishing activities could resume with adaptation. See Letter from John C. Roberge to First Selectman John Opie at 3 (Feb. 4, 2004) (Feb. 4, 2004 Roberge Report); Sept. 30, 2003 Roberge Report at 4. There is a difference between the death of a group of existing shellfish and a permanent loss of habitat in which future generations of shellfish may grow. The CTDEP points to evidence that some shellfish will die following pipeline installation, but points to no evidence that shellfish habitat will be permanently lost.

Report, which found that sedimentation would not cause permanent damage. [16] See Sept. 30, 2003 Roberge Report at 4 (discussing Garrett Report's conclusions regarding sedimentation).

The Denial also cited the Pellegrino Report to support its description of the changes that the benthic substrate would undergo as a result of disturbance caused by pipeline installation. However, rather than commenting on the damage that such disturbances cause, the Pellegrino Report describes the natural recovery process from such disturbances, concluding that such recovery is a matter of course. See Pellegrino Report at 6.[17] If anything, the Pelle-

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[16] The dissent claims that the Roberge Reports "explicitly" rejected the conclusions of Dr. Zajac and the Garrett Report. See post at 68. The dissent correctly states that the Sept. 30, 2003, and Feb. 4, 2004, Roberge Reports referenced an Army Corps of Engineers Report ("ACOE Report") for evidence, "contrary to Dr. Zajac's opinion," that sediment deposits of up to 1 mm will cause up to 50% mortality, and deposits of up to 2 mm will cause 100% mortality to some benthic species. See Sept. 30, 2003 Roberge Report at 3; Feb. 4, 2004 Roberge Report at 2. But this is the same conclusion made in the Garrett Report. In fact, the Roberge Reports never explicitly reject the findings of the Garrett Report regarding the recovery of benthic communities. Likewise, none of the portions of the ACOE Report on the record state that shellfish mortality would result in a permanent loss of habitat.

[17] Contrary to the dissent, see post at 69, the Pellegrino Report's discussion is not confined to "usual" disturbances. "Usual" in the report refers to the fact that it is "infrequent severe events" that typically disrupt benthic communities, thus controlling their structure. If anything, the Pellegrino Report finds that there are a wide variety of events, "physical, biotic or chemical," that can qualify as "severe events" that "usually" control the structure of benthic communities. Neither the dissent nor the CTDEP point to any evidence that pipeline installation would not qualify as an "infrequent severe event".

grino Report demonstrates that benthic communities are naturally shaped by disturbances similar to those that would be caused by the Islander East pipeline project:

> The structure of benthic communities is usually controlled by infrequent severe events (disturbances) that disrupt the community and return the successional process to an earlier stage. Disturbances can be physical, biotic, or chemical in nature and may have multiple direct and indirect impacts on community structure. The recovery process in soft–sediment communities is characterized by a succession of community types, usually beginning with the appearance of opportunistic species (Stage I) and progressing to the establishment of high order (Stage III) successional assemblages . . . .

Pellegrino Report at 6. Indeed, the FEIS confirms this assessment, stating that "fine sediments along coastal margins are regularly resuspended by tidal currents." FEIS at 3-49.

In sum, we see no rational connection between the CTDEP' s conclusion that the pipeline project would cause a permanent harmful change to the benthic substrate and the record evidence cited by the CTDEP. Further, the CTDEP offers no explanation for dismissing record evidence that runs counter to its findings. Neither of the studies cited by the CTDEP support its conclusion that pipeline installation and resultant sediment deposition would "permanently change" the benthic substrate and "dramatically alter" the surrounding natural habitat. Denial at 4. The dissent points to portions of the record indicating that installation would directly harm large areas of the substrate, disturb shellfish habi-

tats, and cause significant shellfish mortality in certain locations. See post at 69-70. However, "we may not supply a reasoned basis for the agency's action that the agency itself has not given." State Farm, 463 U.S. at 43. It is not our province to mine the record for evidence that would support the Denial. Even if such evidence exists, it is the agency's task to conduct a thorough examination of the record, to explain why it has rejected or ignored contradictory evidence, and to come to a decision supported by substantial evidence in the record. As to its first basis for its Denial, the CTDEP did none of the above.

2. Antidegradation Policy

a. Findings

The CTDEP also concluded that the proposed pipeline construction would violate the anti-degradation policy set forth in the CTWQS, which requires "the maintenance and protection of water quality in high quality waters and protection and maintenance of existing uses in all cases." CTWQS at Appx. E-1. According to the CTDEP, "where water quality is better than the criteria established in the Water Quality Standards, such existing high quality must be maintained except under exceptional and very limited circumstances." CTDEP Denial at 4.

The CTDEP determined that the high quality waters in the Thimble Islands ecosystem would be degraded because the "discharge of backfill associated with pipeline installation would result in approximately 5.5 acres of nearshore bottom habitat being permanently degraded and rendered unsuitable for supporting the diverse assemblage of shellfish and other bottom dwelling organisms currently inhabiting this area." Id. at 4. The CTDEP concluded

that impact on shellfish harvesting would "extend well beyond the 5.5 acres of direct disturbance" because the bank-run gravel used as engineered backfill would interfere with harvesting techniques. Id.

Moreover, the CTDEP concluded that "the resulting topographic irregularities over the entire 3,700-acre Islander East corridor caused by sedimentation, backfill with gravel, plow utilization, anchor strikes, and cable sweeps" would "adversely affect the population of resident benthic organisms and shellfish as well as the efficiency and safety of the existing shellfish harvesting operations and handling of shellfish harvesting equipment." Id. at 5. The CTDEP dismissed as unrealistic Islander East's projection that it would achieve a finished substrate with topographic variations of no more than +2' to -1', explaining that, "based on the experience of the Department with the installation of the Iroquois pipeline in 1991, the Department does not agree that such a minimal impact restoration of the work site contours can, in practice, be achieved." Id. The CTDEP also appeared to dismiss even Islander East's proposed minimal variation rate as unacceptable because traditional shellfish harvesting techniques were employed throughout the pipeline route. See id. The CTDEP did not cite any studies or record evidence to support these findings.

b. Analysis

(i) Impacts on Existing Shellfish Harvesting

As mentioned above, the CTDEP Denial asserts that "sedimentation, backfill with gravel, plow utilization, anchor strikes, and cable sweeps" would impact the "entire 3,700 acre [pipeline] corridor," adversely affecting "benthic organisms and shellfish as

well as the efficiency and safety of the existing shellfish harvesting operations." CTDEP Denial at 5. The Denial, however, fails to support its contention that 3,700 acres of Connecticut's surface waters would be disturbed and fails to identify with any specificity the shellfish communities that would be impacted by the pipeline.

The CTDEP Denial points to no evidence supporting its claim that an area of 3,700 acres would be impacted. This apparent assumption is belied by evidence on the record, which the CTDEP did not address. The FEIS refers to a total impacted area of only 3,140 acres across the entire project, including New York and Connecticut waters. FEIS at 3-45 (finding total disturbance to be 3,140 acres, including subsea plowing with buoys, HDD exit hole and "dredge trench and associated spoil mounds"). The FEIS calculation of 3,140 acres is itself likely exaggerated, because it is based on Islander East's proposal before Islander East agreed to ship approximately 24,000 cubic yards of dredged material away on barges.[18] See Islander East Pipeline Co., Offshore Dredge Disposal Permit Amendment at 1 (July 29, 2003); see also TRC Report at 4 (discussing changes in proposed construction methodologies that would reduce impact area of HDD exit hole and narrow the

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[18] Although the Secretary of Commerce's decision on the CZMP appeal was rendered after the CTDEP issued its WQC Denial and therefore was not part of the record available to the CTDEP at the time of its WQC decision, it is informative to note that the Secretary of Commerce found that he "c[ould] not accept Connecticut's claim of impacts to 3,700 acres" because "Connecticut d[id] not provide support for this estimate." *See* Commerce Report at 23-24 (adopting 1121.4 acres as actual impact area, citing, *inter alia*, the TRC Report at 5 and FEIS at 3-45).

dredging trench). To explain clearly how the pipeline would degrade a particular area, the CTDEP must first define the area in question. The CTDEP Denial fails to address this "important aspect of the problem". State Farm, 463 U.S. at 43.

Similarly, the Denial cites a threat to commercial interests that collect shellfish using "traditional harvest shellfishing techniques" in the affected area. CTDEP Denial at 5. CTDEP asserts in general terms that the pipeline is sited "within and adjacent to extensive shellfish grants, leased shellfish grounds and public shellfishing lands", id. at 2, yet fails to point to even one specific lease that would be impacted. Furthermore, the Denial's repeated reference to "dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping," see id. at 3-4, obscures the fact that these activities would occur in discrete areas, and that particular shellfish beds, to the extent they actually do reside near the construction zone, would be subject to different potential injuries of different magnitudes.[19] Although it may be argued that the FEIS contains a description of shellfish beds and leases that lie in the pipeline's path, see FEIS at 3-69, we may not supply a rationale for agency action where the agency has provided none, nor may we

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[19] For example, the FEIS found that out of seven shellfish lease areas located near the pipeline path, four would not be affected because they lie above the area Islander East proposes to excavate using the HDD. *See* FEIS at 3-69. The CTDEP Denial does not mention this evidence, and it is impossible to tell from the Denial that these shellfish grounds would not be impacted by topographic disturbances alleged to result from dredging and plowing. *See* CTDEP Denial at 5 (referencing "topographic irregularities over the entire 3,700 acre Islander East corridor" that would disrupt existing shellfish communities and harvesting activities).

construct support for an agency's conclusion when the agency has not pointed to evidence on the record favoring its decision. See State Farm, 483 U.S. at 50 ("The reviewing court should not attempt itself to make up for such deficiencies; we may not supply a reasoned basis for the agency's action that the agency itself has not given.").

(ii) Impact of Backfill

As discussed above, the CTDEP failed to cite any record evidence supporting its conclusion that pipeline installation would permanently degrade the benthic substrate along the pipeline route. It similarly failed to point to any record evidence supporting its conclusion that the use of engineered bank-run gravel as trench backfill would permanently degrade the nearshore bottom, rendering it unsuitable for shellfish and other bottom-dwelling organisms.

To the contrary, the record reflects that Islander East's use of engineered backfill was proposed to serve a beneficial purpose and, indeed, would have benefitted shellfish habitats. Midway through Islander East's planning process, a representative from the National Marine Fisheries Service expressed concern that non-engineered (all-rock) trench backfill would cause damage to commercial shellfish operations. See Elizabeth Dolezal, Islander East Pipeline Co., LLC, Project Meeting Minutes: Multi Agency Construction Consultation, at 1-2 (Feb. 3, 2003) (Feb. Minutes). At a subsequent meeting, a representative from the Connecticut Bureau of Aquaculture suggested that Islander East use engineered backfill, which would be more "conducive to shellfish." Elizabeth Dolezal, Islander East Pipeline Co., LLC, Project Meeting Minutes: Multi Agency Construction Consultation, at 4 (March 4, 2003) (March Minutes) ("A gen-

eral discussion about the 1991 Iroquois installation resulted in agreement that installation methods have greatly improved and that [engineered] backfilling process and equipment being considered on Islander East have the potential to result in the restoration of shellfish habitat").

Indeed, several studies in the record, commissioned by both proponents and opponents of the pipeline, support the conclusion that the use of engineered backfill could produce future habitats even more diverse than those currently existing. See TRC Report at 6 ("Engineered backfill has value as hard substrate for attachment of organisms and plants, which could promote habitat diversity . . . . This [new] substrate mosaic [created by the backfill] has the potential to increase habitat diversity, supporting greater species richness than a single substrate type."); see also id. at 7 ("[T]he use of engineered backfill may increase biological diversity, and has the potential to improve conditions for two valuable commercial species, oyster and lobster."); Garrett Report at 15 ("The use of engineered fill will create a varied benthic habitat, shelter/relief, and should enhance nearshore bottom conditions.").[20]

The CTDEP's failure to acknowledge this record evidence directly contradicting its conclusion is arbitrary and capricious. See State Farm, 463 U.S. at 43 (holding that an agency's failure to "consider an im-

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[20] We also note that the Secretary of Commerce concurred with the studies' positive assessments of the impact of engineered backfill. *See* Commerce Report at 26 (stating that "Islander East's decision to use engineered backfill . . . addresses . . . concerns" that "sediment reconsolidation will be protracted," and noting that shellfish beds would recover within three to five years).

portant aspect of the problem," or to "offer[] an explanation for its decision that runs counter to the evidence before the agency" is arbitrary and capricious). One document in the record supports the CTDEP's conclusion that shellfish harvesting will be negatively affected by engineered backfill. See Feb. 4, 2004 Roberge Report at 3 (predicting that proposed engineered backfill would "significantly alter the existing benthic communities within the construction footprint," and surmising that the backfill "may completely change the fisheries within the trench band and could require commercial fishing operations to either abandon the area . . . or employ revised . . . methods"). The CTDEP, however, did not cite this document in its Denial, nor did it support its conclusions with any scientific data from the record. As mentioned above, reviewing courts may not "attempt . . . to make up for . . . deficiencies" in agency decisions; "we may not supply a reasoned basis for the agency's action that the agency itself has not given." State Farm, 463 U.S. at 43. We must uphold agency decisions of "less than ideal clarity," id., however, where the record directly contradicts the unsupported reasoning of the agency and the agency fails to support its pronouncements with data or evidence, we may not defer. As the Supreme Court has held:

> There are no findings and no analysis here to justify the choice made, no indication of the basis on which the [agency] exercised its expert discretion. . . . Expert discretion is the lifeblood of the administrative process, but unless we make the requirements for administrative action strict and demanding, expertise, the strength of modern government, can become a monster which rules with no practical limits on its discretion.

Id. at 48 (internal quotation marks omitted).

(iii) Impact of Topographic Irregularities

The CTDEP justified its finding that Islander East would be able to achieve its benthic topography restoration goal solely by referencing its "experience" with the 1991 installation of the Iroquois Pipeline. Denial at 5. Again, the agency cited no data or studies to support this conclusion.

First, the Denial points to no record evidence demonstrating that the Iroquois project permanently degraded the benthic substrate of Long Island Sound waters. Even if the record contained evidence indicating that those waters have yet to recover, we again emphasize that it is not our province to mine the record for data supporting the agency's blanket conclusions.

Second, and more important, the CTDEP failed to acknowledge the extensive work Islander East did to modernize and improve its technology so as to avoid causing similar environmental harm to that wrought by the Iroquois Pipeline. Islander East proposed to: (1) use HDD technology to drill under the seabed so as not to disturb the sea floor, as opposed to Iroquois, which dredged the seafloor from the shore to the 15-foot water mark; (2) place dredge spoil on barges, and backfill trenches with engineered bank-run gravel designed to increase habitat diversity, whereas Iroquois sidecast dredged material back onto the sea floor and backfilled the trenches with some of the sidecast spoil; and (3) restore the sea bottom contours without dragging a 40-ton steel box over the sea floor, as Iroquois had done at the request of CTDEP, apparently with unfortunate results. See generally Islander East WQC Application. Additionally, as indicated by the record, it was acknowledged at two multi-agency meetings that "installation technology

[has] significantly improved since the Iroquois line installation." Feb. Minutes at 1; see also March Minutes at 4 ("A general discussion about the 1991 Iroquois installation resulted in agreement that installation methods have greatly improved . . . .").

The Denial neglected even to mention these proposed installation improvements, much less point to evidence indicating that they would have been inadequate to avoid the topographic irregularities caused by the Iroquois installation. Although, as the dissent points out, see post at 72, it was Islander East's burden to demonstrate its entitlement to favorable action on its WQC application, it was the CTDEP's burden adequately to consider important aspects of the issue. See State Farm, 463 U.S. at 43. By rejecting Islander East's topography predictions out of hand, with no discussion of its attempts to improve construction methods, the agency failed to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made". Id. (internal quotation marks omitted).

The CTDEP's conclusion that the proposed pipeline would violate its antidegradation policy was unsupported and contradicted by evidence in the record, and therefore must be rejected as arbitrary and capricious.

3. Connecticut Coastal Management Act

As the third basis for its WQC Denial, the CTDEP concluded that the proposed pipeline violates the Connecticut Coastal Management Act (CCMA), Conn. Gen. Stat. § 22a-98, which requires that WQCs comport with the CCMA's goals and policies. See Denial at 5. Islander East argues that such consideration

was inappropriate, because the CWA requires that WQC determinations be grounded only in state water quality standards, not in extraneous state statutes. Counsel for the CTDEP concedes that the CCMA "was not an independent basis for denial," and explains that the Denial's "passing mention" of the CCMA was "merely an observation that the project would have adverse impacts upon existing water-dependent resources," relating directly to the Connecticut Water Quality Standards' antidegradation policy. Respondent's Br. at 38- 39. The Denial's discussion of the CCMA certainly appeared to be more than a "passing mention," as it was framed as one of three main reasons supporting the decision to deny Islander East's application. Nevertheless, the court will deem counsel's concession as a waiver of the CCMA as an independent basis for the Denial, and we need not decide whether it might properly have constituted an independent ground for decision. In light of our determinations that the CTDEP's other two justifications for its Denial were insufficient, we must therefore conclude that the Denial as a whole was arbitrary and capricious, and cannot support the agency's decision to deny Islander East's WQC application.

4. Miscellaneous Factors Supporting the Arbitrary and Capricious Determination

Two additional factors contribute to our conclusion that the Denial is arbitrary and capricious. First, the Denial's brevity is troubling. After a two-and-a-half page introduction, the Denial contains a mere two-and-a-half pages of analysis, supported by five record citations, none of which, for reasons already discussed, reasonably support the broad conclusions reached. As points of comparison, the two other governmental entities that have considered the Islander East project to

date, FERC and the Secretary of Commerce,[21] each issued voluminous reports on the potential environmental effects of the proposed pipeline. The FEIS (issued by FERC) spanned hundreds of pages and included citations to all available evidence; its table of contents alone was almost as long as the CTDEP Denial. See FEIS at i-v. The Secretary of Commerce's determination was fifty pages long and included 283 record citations. We do not suggest that it would have been impossible for the CTDEP to issue a well reasoned and adequately supported WQC determination in a shorter report than those of FERC or the Secretary of Commerce. We note simply that the complexity of the matter under consideration did not lend itself easily to brief analysis. Thus, when the CTDEP's failures (a) to provide record support for its conclusions, and (b) to discuss evidence to the contrary are considered together with the surprising brevity of its Denial decision, the latter fact only reinforces our conclusion that the challenged decision is arbitrary and capricious.

Additionally, there is some evidence in the record suggesting that CTDEP knew it was not adequately prepared to support the Denial, and that its issuance had become more a matter of "strategy" in opposing the pipeline than of fact-finding. See CTDEP email from Sue Jacobson to Peter Francis and Ron Rozsa (May 15, 2003) ("[W]e met with folks from the AG's office this morning and they were aghast that we have not yet begun collecting the data."); CTDEP email from Jane Stahl to Peter Francis (May 28, 2003) ("No surprises in Islander East response and I

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[21] The Secretary of Commerce's report was prepared in connection with Islander East's permit application under the Coastal Zone Management Act, but involved similar environmental analysis.

don't think any change in our strategy."); CTDEP email from Sue Jacobson to Jonathan Goldman (Oct. 2, 2003) ("[O]ur biggest hook will be the [pipeline's] potential to lower surface water quality. . . ."); CTDEP email from Peter Francis to Betsey Wingfield (Jan. 21, 2004) ("Sue and I did some work on the 401 letter this week but it still feels incomplete and a bit artificial/manufactured.").

Any effort by the CTDEP to pursue a "strategy" to justify a foreordained opposition to the pipeline would be incompatible with a reviewing agency's mandate to use its expertise to come to a reasoned decision supported by substantial evidence. In fulfilling its statutory prerogative to review Islander East's WQC application, CTDEP was entrusted with identifying the conditions for construction that would adequately safeguard the environment. To the extent some evidence indicates a greater concern with mounting a public relations campaign to preclude building the pipeline than with neutrally evaluating the record evidence, that evidence further supports the conclusion that the Denial was arbitrary and capricious.

CONCLUSION

For the foregoing reasons, we conclude that the CTDEP's Denial of Islander East's application for a WQC was arbitrary and capricious. We draw no conclusion as to whether the record evidence obligates the CTDEP to grant Islander East's application; we require only that the CTDEP conduct the sort of complete and reasoned review required by law. Accordingly, we REMAND to the CTDEP to conduct the type of review contemplated by federal law, within seventy–five days of issuance of this opinion, or if the CTDEP is unwilling or unable to do so, to abdicate its authority to issue a WQC in this case.

KEARSE, *Circuit Judge,* dissenting.

With all due respect, I dissent from the majority's view that the February 5, 2004 decision ("Decision") of respondent State of Connecticut Department of Environmental Protection ("CTDEP"), denying the application of petitioner Islander East Pipeline Company ("Islander East") for a Water Quality Certificate ("WQC") under the Clean Water Act, 33 U.S.C. § 1251 *et seq.* (CWA), with respect to its proposed construction of a natural gas pipeline under Long Island Sound, was arbitrary and capricious. In my view, the Decision sufficiently indicates the basis for CTDEP's order and reveals a rational connection between the facts found and the denial. We are not entitled to second-guess that decision merely because there is evidence in the record from which different inferences might have been drawn.

A. Jurisdiction

Preliminarily, I note my assumption that, under §19 of the Natural Gas Act, 15 U.S.C. § 717r, *as amended by* the Energy Policy Act of 2005, Pub. L. No. 109-58, § 313(b), 119 Stat. 594, 689-90 (2005) ("EPACT"), this Court would have jurisdiction based on *Ex parte Young*, 209 U.S. 123 (1908), to entertain Islander East's petition for review of the CTDEP Decision if we were to grant Islander East's pending motion to add CTDEP's Commissioner Gina McCarthy as a respondent. *See, e.g., Verizon Maryland Inc. v. Public Service Commission*, 535 U.S. 635, 645 (2002) (a federal court may adjudicate a suit against a state official for prospective relief against an ongoing violation of federal law, even though the state itself, or its agency, would enjoy Eleventh Amendment immunity from the same suit). Islander East asks this Court to instruct CTDEP to "promptly issue a WQC to Is-

lander East" (Islander East reply brief in support of petition at 23), which would permit Islander East to pursue its plan to construct the proposed pipeline. Plainly, the relief sought by Islander East is prospective. I would grant Islander East's motion to add the Commissioner as a respondent, as I disagree with the majority's view that that motion is moot.

I do not endorse the majority's view that, in light of EPACT's conferral of jurisdiction on the federal courts of appeals to review orders such as denials of CWA certificates, Connecticut has waived its sovereign immunity with respect to its denial of Islander East's application for such a certificate. A state may of course waive its sovereign immunity; but for a waiver to be inferred from the state's conduct, that conduct must have been "knowing[], cognizant of the [waiver] consequences". *Pennhurst State School & Hospital v. Halderman*, 451 U.S. 1, 17 (1981). CTDEP denied Islander East's application in February 2004; EPACT was not enacted until August 2005. I cannot view CTDEP's action in denying Islander East's petition as a knowing waiver of sovereign immunity on the basis of a law that did not become effective until 18 months later.

The majority finds that Connecticut has waived its sovereign immunity in the present matter by failing to discontinue its participation in Clean Water Act regulation of natural gas pipeline projects after EPACT was enacted. I do not agree. The fact that Connecticut, with awareness of the effect of EPACT since mid-2005, elects to continue to decide applications for CWA certificates may perhaps constitute a waiver with respect to its post-EPACT decisions; but its present actions do not establish knowledge or voluntariness with respect to its past actions.

Finally, I disagree with the majority's view that Connecticut lacks sovereign immunity on the theory that EPACT's effect is merely procedural, *see* Majority Opinion *ante* at 24-26. Although jurisdictional statutes generally "speak to the power of the court rather than to the rights or obligations of the parties," *Landgraf v. USI Film Products*, 511 U.S. 244, 274 (1994) (internal quotation marks omitted), and although *Landgraf* does state that "[c]hanges in procedural rules may often be applied in suits arising before their enactment without raising concerns about retroactivity," id. at 275, I cannot regard an enactment that strips a state of immunity from suit as a matter of mere procedure. Sovereign immunity from suit is a privilege, *see, e.g., College Savings Bank v. Florida Prepaid Postsecondary Education Expense Board*, 527 U.S. 666, 681-82 (1999); the elimination of that privilege is surely a matter of substance.

Nonetheless, the fact that CTDEP, a state agency, is immune from suit does not mean that relief under EPACT, if merited, would be unavailable. If Islander East's motion to add the CTDEP Commissioner were granted, as discussed above there would be no sovereign-immunity bar to entertaining its petition, which seeks prospective relief; and "[w]hen the intervening statute authorizes or affects the propriety of prospective relief, application of the new provision is not retroactive," *Landgraf*, 511 U.S. at 273.

Accordingly, I turn to the merits of Islander East's petition and the standard under which the petition is to be reviewed.

B. The Merits

1. Standard of Review

Although EPACT provides little guidance as to the contours of what it refers to as a "civil action for the

review of an order," 15 U.S.C. § 717r(d)(1), or as to the standard for review of such an order, I accept the proposition that, in this case, the proper standard is the arbitrary-and-capricious standard as set forth in the federal Administrative Procedure Act ("APA"), *see* 5 U.S.C. § 706. In conferring federal jurisdiction to review such decisions, EPACT groups orders of "a Federal agency" with orders of a "State administrative agency acting pursuant to Federal law," 15 U.S.C. § 717r(d)(1); and where, as here, a state agency has acted as a "[CWA-]deputized regulator[] under the authority of federal law," Majority Opinion *ante* at 17, I see no reason to apply to the state agency's orders a review standard different from the APA arbitrary-and-capricious standard applicable to actions of federal agencies.

The APA provides, in pertinent part, that a court reviewing an agency decision is to set aside a decision that is "found to be . . . arbitrary[or] capricious," and that in making such a determination, "the court *shall review the whole record or* those parts of it cited by a party." 5 U.S.C. § 706 (emphasis added). Although the agency must provide some rational explanation for its decision, these APA provisions establish a standard of review that is deferential:

> *The scope of review under the "arbitrary and capricious" standard is narrow* and *a court is not to substitute its judgment for that of the agency.* Nevertheless, the agency must examine the relevant data and articulate a satisfactory explanation for its action including a "rational connection between the facts found and the choice made." *Burlington Truck Lines, Inc.* v. *United States*, 371 U.S. 156, 168 (1962). In reviewing that explanation, we must "consider whether the decision was

based on a consideration of the relevant factors and whether there has been a clear error of judgment". *Bowman Transportation, Inc.* v. *Arkansas-Best Freight System, Inc.*, [419 U.S. 281, 285 (1974)]; *Citizens to Preserve Overton Park* v. *Volpe*, [401 U.S. 402, 416 (1971)]. Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise. The reviewing court should not attempt itself to make up for such deficiencies; we may not supply a reasoned basis for the agency's action that the agency itself has not given. *SEC* v. *Chenery Corp.*, 332 U.S. 194, 196 (1947). *We will, however, "uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned." Bowman Transportation, Inc.* v. *Arkansas-Best Freight System, Inc., supra*, at 286. See also *Camp* v. *Pitts*, 411 U.S. 138, 142- 143 (1973) (*per curiam*) .

Motor Vehicle Manufacturers Ass'n of the United States, Inc. v. State Farm Mutual Automobile Insurance Co., 463 U.S. 29, 43 (1983) ("*State Farm*") (emphases added); *see also id.* at 42 ("[U]nder this standard, a reviewing court may not set aside an agency rule that is rational, based on consideration of the relevant factors[,] and within the scope of the authority delegated to the agency by the statute.").

"A court reviewing an agency's adjudicative action should accept the agency's factual findings if those findings are supported by substantial evidence in the

record as a whole." *Arkansas v. Oklahoma*, 503 U.S. 91, 113 (1992) (emphasis omitted); *see also State Farm*, 463 U.S. at 44 (agency's factual findings are to be upheld if "supported by substantial evidence on *the record considered as a whole*" (emphasis added) (internal quotation marks omitted)). Since an agency's findings are to be upheld if they are supported "by *substantial* evidence on the record as a whole," *State Farm*, 463 U.S. at 44 (emphasis added), the statement in *State Farm* that an order may be found arbitrary and capricious if it "runs counter to *the* evidence before the agency," *id.* at 43 (emphasis added), means that it may be so found if it runs counter to all of the substantial evidence. Thus, the Court has stated that this facet of the arbitrary-and-capricious determination is in essence a "deci[sion as to] whether on th[e] record it would have been *possible* for a reasonable jury to reach the [agency's] conclusion," *Allentown Mack Sales & Service, Inc. v. NLRB*, 522 U.S. 359, 366-67 (1998) (emphasis added). Where there is evidence in the record from which a reasonable jury could have reached the agency's decision, the "court is not to substitute its judgment for that of the agency," *State Farm*, 463 U.S. at 43.

The majority takes the position that "[i] t is not our province to mine the record for evidence that would support [an agency decision]." Majority Opinion *ante* at 39. That characterization of the scope of review confuses the reasons for a decision with the evidence to support that decision. We are not to supply the rationale for an agency decision; but where the agency has stated its rationale, or where its rationale "may reasonably be discerned", *State Farm*, 463 U.S. at 43, we are required to "review the whole record," 5 U.S.C. § 706, and to uphold the agency decision if it is "supported by substantial evidence on the record con-

sidered as a whole," *State Farm*, 463 U.S. at 44 (internal quotation marks omitted).

Given these principles, I cannot conclude that CTDEP's denial of Islander East's application should be disturbed.

2. The Contents of the CTDEP Decision

Preliminarily, I note that the CTDEP Decision is not so sketchy as the majority suggests. Although the text of the Decision is six pages, the Decision annexes and refers to appendices covering some 300 pages. The appendices to the Decision include a United States Environmental Protection Agency-funded survey of water quality in Long Island Sound (*see* Decision Appendix B); a report on "Potential Sedimentation Impacts Which Could Result from Dredging," authored by Roberge Associates Coastal Engineers, LLC, comprising a series of analyses, dated May 5, 2003, September 30, 2003, and February 4, 2004 (collectively the "Roberge Reports"), of the likely effects of the Islander East pipeline as initially proposed and as subsequently amended (*see* Decision Appendix E); a report by coastal resource analyst Peter H. Pellegrino entitled "Macrobenthic Community Structure along the Proposed Islander East Gas Pipeline Route in Long Island Sound" ("Pellegrino Report") (*see* Decision Appendix F); and a 12-page July 29, 2003 letter from CTDEP to Islander East explaining CTDEP's objections to Islander East's initial proposal and requesting additional specified information (*see* Decision Appendix G). Materials that an agency cites and attaches to its decision must be taken into account in determining whether the decision is arbitrary and capricious. *See* 5 U.S.C. § 706.

Given the text of the CTDEP Decision, which I attach as an appendix to this dissent, and the contents of the Appendices that were appended to the Decision, I think it clear that CTDEP denied Islander East's application on the basis that the proposed pipeline, which is not a water-dependent use, would be routed through prime shellfish habitat, would have a lengthy, significant, adverse impact of unknown duration on the shellfish industry, and would displace the obviously water-dependent activity of shellfishing. (*See* Decision at 2-6.)

The majority appears to suggest that the shellfish-injury rationale is a creation of this dissent rather than a rationale given by CTDEP, as the majority opinion (a) states that "[t]he dissent points to portions of the record indicating that installation would directly harm large areas of the substrate, disturb shellfish habitats, and cause significant shellfish mortality in certain locations," and (b) continues by stating, "[h]owever, 'we may not supply a reasoned basis for the agency's action that the agency itself has not given,'" Majority Opinion *ante* at 39 (quoting *State Farm*, 463 U.S. at 43). In suggesting that injury to shellfish and the shellfish industry was not a basis relied on by CTDEP (and in stating as well that CTDEP "fail[ed] to identify with any specificity the shellfish communities that would be impacted by the pipeline," Majority Opinion *ante* at 42), the majority ignores even the text of the Decision. With respect to the issue of shellfish habitat alteration, the Decision stated in part as follows:

> Islander East has proposed a regulated activity in coastal waters of the State in the nearshore waters of the Thimble Islands complex in the Town of Branford. Overall, chemical and bacte-

riological water quality conditions in this location are consistently excellent. . . .

In concert with excellent water quality, the Thimble Islands region also exhibits an abundance of high quality habitat. These physical conditions combine to support a diverse and abundant assemblage of marine life. . . . *The United States Fish and Wildlife Service, for example, has designated this particular area a "significant habitat complex in need of protection."* In addition to providing habitat for a variety of demersal and pelagic species, these diverse bottom habitats of the Thimble Islands region also support eastern oyster (*Crassostrea virginica*), hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), blue mussels (*Mytilus edulis*), and channel whelk (*Busycon canaliculatum*).

These species, clams and oysters in particular, support significant commercial shellfish harvesting operations. The pipeline corridor, as proposed by Islander East, is sited within and adjacent to extensive shellfish grants, leased shellfish grounds and public shellfishing lands. The submerged land through which the pipeline route is proposed that is not currently leased *is also productive shellfish habitat and is significant for potential future expansion of the shellfish industry*, particularly in as much as the western reaches of Long Island Sound have been more affected in recent decades by lower dissolved oxygen levels and other environmental impacts that affect shellfish and benthic abundance. *The shellfish industry is an economically-significant and long-established water-dependent use in Connecticut.* In fact, Connecticut's nationally-recognized shellfish industry pro-

duces the highest quality oysters in the United States. . . .

The shellfishing industry in the Thimble Islands region thrives because of the excellent water quality and exceptional habitat conditions. . . . [T]he water is of sufficiently high quality to allow for direct consumption of shellfish from these beds without the requirement for relocation and depuration of the shellfish prior to human consumption. . . . [T]he waters off Branford support approximately 46% of shellfishing areas approved for direct harvest in eastern Connecticut. . . . Th[e] proposed installation would include dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping.

These activities would result in negative impacts to both the water quality and substrate. Turbidity of the water column would be relatively short-term. When this material precipitates out of the water column, it will result in sediment deposition on the benthic substrate. At the request of the Town of Branford's Blue Ribbon Committee, John Roberge, P.E., LLC, prepared an assessment of sedimentation impacts associated with pipeline installation as modified by Islander East to mitigate sediment dispersion. The following sediment deposition pattern was estimated in Mr. Roberge's study:

> 1 mm up to 100 meters from the trench centerline (approximately 70 acres); and
>
> 3 mm up to 40 meters from the trench centerline (approximately 35 acres).

The Department has determined that the negative impacts resulting from this depositional

layer, in addition to direct substrate disturbance associated with dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping, are inconsistent with the Water Quality Standards. *Pipeline installation would not only temporarily disturb water quality, it would permanently change the substrate and negatively impact the existing aquatic biota that depend on such substrate.* The Connecticut Water Quality Standards define biological integrity as the ability of any aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitats of a region. *The combined assaults of direct habitat disturbance and temporary water quality impacts resulting in sediment deposition negatively impact the overall biological integrity of the Thimbles* [sic] *Islands ecosystem and are therefore inconsistent with Standard No. 1 of the Connecticut Water Quality Standards.*

Pipeline installation through the Thimble Islands ecosystem will dramatically alter natural habitats and adversely impact the existing community of organisms. As discussed in a study entitled "Macrobenthic Community Structure Along The Proposed Islander East Pipeline Route In Long Island Sound," by Pellegrino, there are dramatic differences in community structure associated with a disturbed versus a non-disturbed substrate. Once the original bottom has been disturbed, a soft sediment, referred to as the nephloide layer, covers the bottom and fills in any depressions left on the disturbed surface. ***Thus, the high-order or late successional***

> ***stage species such as clams and oysters that lived in the original substrate can no longer exist. The community structure of the original substrate changes to that of early-stage opportunistic species such as polychaete worms. It is uncertain whether the associated diverse assemblage of bottom dwelling organisms currently present in this area could be reestablished. No studies exist from which one may predict a known recovery time for both these benthic communities and the substrate, if, indeed, there is any significant recovery.***

(Decision at 2-4 (footnotes omitted) (emphases added).) Thus, it is clear that CTDEP denied Islander East's application based principally on the finding, in short, that if its project were carried out, where now there is an abundance of oysters and clams, there could well be only worms.

CTDEP also noted that the Connecticut antidegradation policy requires the maintenance and protection of water quality in high-quality-water areas and "mandates that existing uses must continue to be supported in all cases." (Decision at 4.) The Decision stated that the above findings showed that the Islander East pipeline would not be consistent with this policy:

> As previously described, the pipeline is proposed to be sited within and adjacent to extensive shellfish grants, leased shellfish grounds and public shellfish lands. The discharge of backfill associated with pipeline installation would result in approximately 5.5 acres of nearshore bottom habitat being permanently degraded and rendered unsuitable for supporting the diverse assemblage of

> shellfish and other bottom dwelling organisms currently inhabiting this area.

(*Id.*) The Decision concluded that CTDEP had

> determined that the regulated activity in the proposed location will permanently alter the existing high quality physical and biological integrity and productivity of this area to the extent that the existing uses for habitat for marine fish, other aquatic life and wildlife and shellfish harvesting for direct human consumption will be impaired. *Essential shellfish habitat will be lost due to the temporary and permanent alteration of the benthic environment resulting from the proposed work.* Finally, *the siting of the non-water dependent pipeline through prime shellfish habitat would cause a significant and permanent adverse impact to a water-dependent use by displacing the water-dependent use of shellfishing with the non-water-dependent use of natural gas transmission.*

(*Id.* at 6 (emphases added).)

The majority states that CTDEP failed to cite any studies or record evidence to support its findings. *See, e.g.*, Majority Opinion *ante* at 33 ("The CTDEP cited no scientific studies or other evidence that directly supported the . . . findings" that the "sediment deposition and direct benthic substrate disturbances resulting from installation would 'permanently change the substrate and negatively impact the existing aquatic biota that depend on such substrate.'" (quoting Decision at 4)). The majority also states that CTDEP

> failed to mention that at least four scientific studies in the record concluded that the sub-

> strate was capable of a return to its existing condition—findings directly opposite to its conclusion that pipeline installation would "permanently change the substrate" and "dramatically alter natural habitats."

Majority Opinion *ante* at 35 (quoting Decision at 4). By these "opposite" opinions, the majority apparently refers to (1) an opinion by consulting marine biologist Dr. Roman Zajac ("Zajac opinion"); (2) a report by TRC Environmental Corp. entitled "Evaluation of Benthic Impacts Associated with Islander East's Modified Offshore Construction Techniques" ("TRC Report"), which quotes and relies on the Zajac opinion; (3) a report by the Garrett Group, Ltd., entitled "Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project, Through the Nearshore Area of Long Island Sound—Branford, Connecticut" ("Garrett Group Report"); and (4) the Pellegrino Report. *See* Majority Opinion *ante* at 34-35.

But both the contention that CTDEP cited nothing to support its findings and the contention that CTDEP failed to consider the "opposite" opinions are contradicted by the record. First, CTDEP pointed out that coastal engineering consultant John Roberge had "prepared an assessment of sedimentation impacts associated with pipeline installation as modified by Islander East to mitigate sediment dispersion" (Decision at 3), and it attached his series of reports to the Decision as Appendix E (*see id.* n.10). The Roberge Reports predicted that "benthic species will likely be killed even in areas receiving a thin veneer of deposited sediments" (Roberge Report dated February 4, 2004, at 2; Roberge Report dated September 30, 2003, at 3) and that "[t]his seafloor burial has the potential

to result in significant mortality within the benthic communities" (Roberge Report dated February 4, 2004, at 3; Roberge Report dated September 30, 2003, at 4). In making this prediction, the Roberge Reports stated, *inter alia*, that the Islander East pipeline would cover 69.8 acres with up to 1 mm of sediment and cover 34.9 acres with up to 3 mm of sediment, and noted that a study by the United States Army Corps of Engineers had found "that sediment deposits of up to 1 mm will cause up to 50% mortality, and deposits of up to 2 mm will cause *100% mortality* to some benthic species." (Roberge Report dated February 4, 2004, at 3 (emphasis added); Roberge Report dated September 30, 2003, at 4 (emphasis added)). This evidence supported CTDEP's finding that the Islander East pipeline would have an adverse and permanent effect on the makeup of the benthic community.

Second, the Roberge Reports expressly mentioned two of the studies on which the majority relies for the opposite conclusion:

> As reported in the "Preliminary Report on the Anticipated Biological Impacts Associated with the Proposed Islander East Pipeline Project, through the Nearshore Area of Long Island Sound—Branford, CT," *prepared by The Garrett Group*, LTD and dated May 8, 2003, near and far-field deposition of suspended solids may cause a measurable cover, or a thin veneer of fine particles cover over proximal hard bottom substrate. The Garrett report references benthic studies performed by the US Army Corps of Engineers (LaSalle et all [sic] 1991) which note[], contrary to *Dr. Zajac's opinion*, that sediment deposits of up to 1 mm will cause up to 50% mor-

> tality, and deposits of up to 2 mm will cause 100% mortality to some benthic species.

(Decision Appendix E, Roberge Report dated February 4, 2004, at 2 (emphases added); Roberge Report dated September 30, 2003, at 4 (emphases added).) Although the majority opinion states that "any conclusions that Roberge . . . made as to mortality caused by sedimentation apparently *were drawn from the Garrett Report*, which found that sedimentation would not cause permanent damage," Majority Opinion *ante* at 37 (emphasis added), it is plain from the above language of the Roberge Reports themselves that the Roberge Reports explicitly rejected the views of the Garrett Group and Dr. Zajac in light of the contrary findings of the Army Corps of Engineers--in studies to which the Garrett Group Report itself had adverted. Further, given the reliance of the TRC Report on the opinion of Dr. Zajac, *see* Majority Opinion *ante* at 34 (quoting TRC Report's quotation of the Zajac opinion), the Roberge Reports can properly be regarded as implicitly rejecting the views of the TRC Report as well. Although the majority suggests that CTDEP should have granted Islander East's application based on the reports such as that of the Garrett Group, it is the very antithesis of "deferential" review to conclude that an agency was required to credit a report that cites evidence contradicting the report's own conclusions.

The fourth report advanced by the majority as one of the "opposite" opinions supposedly ignored by CTDEP is the Pellegrino Report. The majority's suggestion that this report was ignored by CTDEP is peculiar, given that the report is annexed to the Decision as Appendix F. Further, the majority's reliance on the Pellegrino Report as a basis for the conclusion

that the CTDEP Decision is arbitrary and capricious is puzzling. The conclusion of this report stated that "[t]he structure of benthic communities *is usually controlled by* infrequent severe events (disturbances) that disrupt the community and return the successional process to an earlier stage," and that the "recovery process in soft-sediment communities is characterized by a succession of community types, usually beginning with the appearance of opportunistic species," *i.e.*, polychaete worms, and eventually "progressing to the establishment of high order . . . successional assemblages," such as bivalves and gastropods (Pellegrino Report at 6 (emphasis added)); but the Pellegrino Report contained no discussion whatsoever of the impact on such communities by a pipeline construction process--a process that surely is not the "usual[]" type of "disturbance[]." Indeed, the stated purpose of the Pellegrino Report was simply to describe the results of a benthic survey along the proposed Islander East pipeline route, in order "to document existing benthic community structure and to provide a benthic baseline against which future changes may be detected." (*Id.* at 2.)

In sum, I cannot agree with the majority's view that the CTDEP "fail[ed] to acknowledge the existence of the above studies," Majority Opinion *ante* at 35-36 n.13. I think it appropriate, in conducting a review that is to be deferential, to infer that CTDEP must have acknowledged the study it attached to its Decision and, in relying on the Roberge Reports, implicitly acknowledged the existence of studies that were explicitly mentioned and disputed in the Roberge Reports.

I note that the majority also relies on many statements in the Final Environmental Impact Statement

("FEIS") on Islander East's proposed pipeline, issued by the United States Federal Energy Regulatory Commission ("FERC"), *see, e.g.*, Majority Opinion *ante* at 32-33, 38-39. The FEIS, however, also included many findings not mentioned by the majority that are consistent with CTDEP's conclusion that the Islander East pipeline would adversely impact benthic communities. For example, the FEIS indicates that construction of the trench and installation of the pipeline would directly impact 3,140 acres of Sound bottom, including 298 acres disturbed by trenching, 23.8 acres by the creation of an "exit hole" needed for horizontal directional drilling, 2,807 acres disturbed by cable sweep, and 9.7 acres by anchor strikes. (*See* FEIS at 3-45.) Islander East expected to make more than 2,000 anchor strikes, each causing a 1376-cubic-foot hole in the Sound floor (*see id.* at 3-65); "lobsters . . . in the direct area of anchor placement would suffer mortality" (*id.* at 3-72), and *"[t]he persistence of these depressions would represent a long-term conversion of benthic habitat"* (id. at 3-65 (emphasis added)); "[d]ue to the weight of the anchor and the depth of the [anchor] scar, *the impact on shellfish likely would be complete mortality* within the footprint of the scar" (*id.* at 3-71 (emphasis added)). The record shows that CTDEP had considered the FEIS. (*See* Decision Appendix G at 9 ("Staff have reviewed FERC's Final Environmental Impact Statement (FEIS) FERC/EIS-0143F dated August 2002.").)

The majority repeatedly faults the CTDEP Decision for "not point[ing] to *evidence*" in support of its rationale that the shellfish industry would be negatively impacted, Majority Opinion *ante* at 44 (emphasis added); *see also id.* at 43 (Decision "fails to point to even one specific lease that would be impacted"), and states that "'[t]he reviewing court should not at-

tempt itself to make up for such deficiencies,'" *id.* at 44 (quoting *State Farm*, 463 U.S. at 43). However, as can be seen from the more complete *State Farm* passage quoted above in Part B.1. of this dissent, the Supreme Court's reference to "such" deficiencies did not include a failure to "point to evidence," Majority Opinion *ante* at 49; rather, that passage referred to an agency's reliance on factors unintended by Congress, or an "entire[]" failure "to consider an important aspect of the problem," or proffering of explanations "so implausible that [they] could not be ascribed to a difference in view or the product of agency expertise", *State Farm*, 463 U.S. at 43.

Further, I disagree with the majority's view that the record evidence indicates with certainty "that direct pipeline installation and accompanying sediment deposition *would not* have a permanent effect on the benthic environment," Majority Opinion *ante* at 33 (emphasis added). The majority cites the FEIS and the four "opposite" opinions that it contends CTDEP failed to consider. But not only does the record indicate, as discussed above, that these sources were considered by CTDEP; the record also reveals that the reports themselves do not match the majority's certainty. For example, the TRC Report states that the anticipated "degree of sediment deposition . . . *should* have little impact on sea floor habitats and communities, and *may* approach background/ natural levels of sediment resuspension and deposition in the area," but only "*if* the predictions are correct." (TRC Report at 5 (emphases added) (internal quotation marks omitted).) The FEIS states that "recovery of most of the disturbed benthic communities along the pipeline route *could* be expected to occur within 2 to 5 years" (FEIS at 3-66 (emphasis added)) but that "some portions of shellfish habitat may remain unproductive

for many years due to trenching activities" (*id.* at 3-70 (emphasis added)). And while the Garrett Group Report states at one point that "the bottom *will* recover after several years" (Garrett Group Report at ES-2 (emphasis added)), this is said to be based on the Garrett Group's "professional experience . . . that bottom recoveries *typically* require several years in the absence of additional activity" (*id.* at 5 (emphasis added)), and that report itself acknowledges that "[r]ecolonization of bottom disturbances *can vary dramatically* (*id.* at ES-1 (emphasis added))."

It was hardly irrational, therefore, for CTDEP to conclude from these hedged opinions that "[n]o studies exist from which one may predict *a known recovery time*." (Decision at 4 (emphasis added).) Not one of the reports relied on by the majority was unequivocal; and CTDEP's own experience with the Iroquois Pipeline project--completed more than a dozen years earlier--supported CTDEP's view that the adverse impacts of such a project were likely permanent. CTDEP stated that habitat lost in the Iroquois Pipeline installation in 1991 *"has not recovered to date."* (Decision Appendix G at 6 (emphasis added).)

Although the majority states that the Iroquois Pipeline installation is not comparable because Islander East proposes to use horizontal directional drilling ("HDD"), rather than dredging, in order to mitigate topography problems, the record does not indicate that Islander East carried its burden of showing that that proposal would have a substantial mitigating effect. The total length of the proposed pipeline was to be 44.8 miles, of which 22.7 miles would be under the waters of Long Island Sound. While the majority opinion might give the impression that nearly half of the pipeline to be laid underwater

would be installed by means of HDD, *see* Majority Opinion *ante* at 11 (describing the proposed HDD as "initiat[ing] the pipeline installation at a point onshore in Connecticut, approximately 700 feet inland from the shoreline [and] continu[ing] until mile post (MP) 10.9"), in fact mile post 10.9 is only 3,500 feet offshore. The mile posts begin in North Haven, Connecticut, 10.1 miles from the point in Branford at which the pipeline was to enter the Sound. (*See* FEIS at 2-12.) Thus, Islander East planned to use HDD under water only for the nearshore 3,500 feet of the pipeline (*see* Decision at 3), *i.e.*, less than two-thirds of one mile, and not for the remaining 22+ miles of underwater installation. For the 97% of the underwater section of the pipeline in the Thimble Islands region and beyond, Islander East proposed to dredge and plow, as was done for the Iroquois Pipeline. And the needed HDD exit hole--a 23.8-acre underwater pit that would be the dirtiest part of the pipeline installation, as it must be created by mechanical dredging and is the area into which the muds and lubricants used in the HDD process would be spewed (*see* FEIS at 3-49, 3-52 to 3-53)--would have been less than one-tenth of a mile from the Thimble Islands and their (currently) especially-clean waters (*see* Decision Appendix C).

Finally, the majority states that CTDEP "fails to support" its "claim that an area of 3,700 acres would be impacted" by the Islander East pipeline, Majority Opinion *ante* at 42, and states that "[t]he FEIS refers to a total impacted area of only 3,140 acres," *id.* It does not appear to me that the CTDEP Decision was intended to mean that all 3,700 acres would be uniformly impacted. The Decision states that "*topographic irregularities*" would occur "over the entire 3,700-acre Islander East corridor," Decision at 5 (em-

phasis added), and it is plain that the pipeline construction process would not result in uniform conditions on the floor of the Sound. The FEIS, for example, discussed the fact that Islander East proposed to make 2,628 anchor strikes (*see* FEIS at 3- 65); each of them would cause a 1376-cubic-foot hole in the Sound floor (*see id.* at 3-45, 3-65), holes that would "persist[]" and cause a "long-term conversion of benthic habitat" (id. at 3-65). In any event, even if "*only* 3,140," Majority Opinion *ante* at 42 (emphasis added), out of 3,700 acres would be impacted as the FEIS found, I would be hard-pressed to find that an absence of anticipated impact on 560 acres out of 3,700 (*i.e.*, 15% of the project) made the denial of the requested permit arbitrary and capricious.

To summarize, the CTDEP Decision explained that the Islander East application was being denied because construction of the pipeline planned by Islander East--to be routed through the waters of the Thimble Islands, a thriving shellfishing area that the United States Fish and Wildlife Service has designated as a significant habitat complex in need of protection--would likely permanently change the benthic substrate, depositing layers of sediment in which clams and oysters, which lived in the original substrate, could no longer survive; that this would have adverse effects on shellfish and the shellfish industry, given that although early-stage opportunistic species such as polychaete worms could be expected to return to the areas disturbed by pipeline construction, it is uncertain when the higher-order organisms currently present in these areas would return, if ever. CTDEP's denial and rationale are supported by evidence in the record as a whole, and other opinions were addressed in reports cited by CTDEP and attached to its Decision. Accordingly, I dissent from the

majority's conclusion that CTDEP's Decision is arbitrary and capricious.

APPENDIX D

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

[Logo] [Logo]

February 5, 2004

Mr. Gene Muhlherr
Islander East Pipeline Company, LLC
454 East Main Street, Route 1
Branford, CT 06405

RE: WATER QUALITY CERTIFICATE
APP. #200300937

Towns: Cheshire, Wallingford, North Haven, East Haven, North Branford and Branford

Dear Mr. Muhlherr:

On March 14, 2003, the Islander East Pipeline Company, LLC ("Islander East") submitted a Water Quality Certificate (WQC) application for discharges to the waters, of the State pursuant to Section 401(a)(1) of the Federal Clean Water Act (the "Act"), as amended. The proposed activity includes the upgrade of an existing natural gas transmission pipeline system in Cheshire and North Haven and installation of a new 24" diameter pipeline in East Haven, North Branford and Branford continuing across Long Island Sound to Brookhaven, New York.

Determination

The proposed work was evaluated for compliance with the applicable provisions of sections 301, 302, 303, 306 and 307 of the Act, the State of Connecticut's Water Quality Standards including the Connecticut Anti-Degradation Implementation Pol-

icy, and Water Quality Criteria adopted pursuant to Section 22a-426 of the Connecticut General Statutes and the goals and policies of Chapter 444 of the Connecticut General Statutes. **Based on this review, the Department of Environmental Protection ("Department") has determined that the proposed work in the proposed location is inconsistent with the Water Quality Standards. The work, as proposed, would adversely affect water quality and prohibit the existing and designated uses of the receiving waters. Accordingly, the Department hereby denies Water Quality Certification of Application #200300937 in accordance with Section 401(a)(1) of the Clean Water Act.**

Connecticut Water Quality Standards

Section 303 of the Act requires that states adopt surface water quality standards. These state water quality standards are submitted to, and must be approved by, the Administrator of the U. S. Environmental Protection Agency ("EPA"). State water quality standards provide the basis for water quality management decision-making by the Department and are a critical component in the state's efforts to achieve the fundamental goal established in the Act of protecting and maintaining the physical, chemical, and biological integrity of the nation's waters. At a minimum, the standards must be sufficient also to meet the interim goals of the Act for achieving water quality conditions that allow for protection and propagation of fish, shellfish, and wildlife, and for recreation in and on the water.

As required by the Act. Connecticut's Water Quality Standards include:

- beneficial designated uses for each waterbody *(e.g.,* aquatic life, swimming, drinking, navigation. *etc.)* that are assigned on the basis of the waterbody's classification;
- narrative and/or numeric water quality criteria that must be met to support each designated use; and
- policy statements including an anti-degradation policy and implementation procedures designed to maintain and protect water quality in high quality waters, and protect and maintain existing uses in all cases.[1]

These elements do not stand alone, but must be read in such a fashion as to be internally consistent within the Water Quality Standards and consistent with the goals of the Act.

Coastal Water Classification and Designated Uses

Islander East has proposed a regulated activity in coastal waters of the State in the nearshore waters of the Thimble Islands complex in the Town of Branford. Overall, chemical and bacteriological water quality conditions in this location are consistently excellent. Long-term water quality monitoring initiated in 1991 by the Department as part of the Long Island Sound Study[2] shows that only rarely are these

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[1] See Appendix A. State of Connecticut, Department of Environmental Protection, *Water Quality Standards.*

[2] Initiated in 1985, the Long Island Sound Study (LISS) is a partnership of federal, state, and local governments agencies, private organizations and citizens formed to develop and implement a comprehensive conservation and management plan for Long Island Sound. Funding support for the LISS is provided by the Environmental Protection Agency through the National

waters subjected to the impacts of low dissolved oxygen conditions that generally develop each summer in areas farther to the west in Long Island Sound[3]. The resulting water quality classifications for this region are SB/SA and SA.[4] The SB/SA Classification signifies that the water quality management goal is to achieve full support of all Class SA designated uses. Class SA waters are designated for habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation.[5]

In concert with excellent water quality, the Thimble Islands region also exhibits an abundance of high quality habitat. These physical conditions combine to support a diverse and abundant assemblage of marine life. The Thimble Islands typically emerge from relatively shallow waters, approximately 30' deep. In addition to this significant area of shallow water-land interface where biological diversity is rich and productive, this area hosts unique subtidal conditions including submerged rock reefs and a diversity of benthic habitats that range from soft mud to compacted sand and gravel all of which contribute to the biological integrity of the aquatic ecosystem. The United States Fish and Wildlife

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Estuary Program and by the States of Connecticut and New York.

[3] See Appendix B for summary of monitoring program and survey results.

[4] See Appendix C for map of Water Quality Classification areas.

[5] Please refer to Appendix A (*Water Quality Standards*, pages 15-17) for a more complete description of these classifications and designated uses.

Service, for example, has designated this particular area a "significant habitat complex in need of protection."[6] In addition to providing habitat for a variety of demersal and pelagic species, these diverse bottom habitats of the Thimble Islands region also support eastern oyster (*Crassostrea virginica*), hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), blue mussels (*Mytilus edulis*), and channel whelk. (*Busycon canaliculatum*).

These species, clams and oysters in particular, support significant commercial shellfish harvesting operations. The pipeline corridor, as proposed by Islander East, is sited within and adjacent to extensive shellfish grants, leased shellfish grounds and public shellfishing lands. The submerged land through which the pipeline route is proposed that is not currently leased is also productive shellfish habitat and is significant for potential future expansion of the shellfish industry, particularly in as much as the western reaches of Long Island Sound have been more affected in recent decades by lower dissolved oxygen levels and other environmental impacts that affect shellfish and benthic abundance. The shellfish industry is an economically-significant and long-established water-dependent use in Connecticut. In fact, Connecticut's nationally-recognized shellfish industry produces the highest quality oysters in the United States. Despite a devastating blow to oyster production from MSX[7] in 1997, the annual

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[6] *Northeast Coastal Areas Study: Significant Coastal Habitats of Southern New England and Portions of Long Island, New York* (August, 1991). The United States National Marine Fisheries Service has also designated Long Island Sound as an "Essential Fish Habitat (EFH)."

[7] MSX (multinucleated sphere unknown) is a single-cell parasite that invades the oyster's soft body, grows and divides within

commercial landing statistics, provided by the National Oceanic and Atmospheric Administration-Fisheries. Connecticut continues to compete nationally and in 2001 was ranked first in hard clam production on the east coast and second for oyster market harvest.

The shellfishing industry in the Thimble Islands region thrives because of the excellent water quality and exceptional habitat conditions. Of particular importance to maintaining the existing shellfishing use of this area is authorization by the State of Connecticut Department of Agriculture, Aquaculture Division (DA/AD) for harvest of shellfish for direct human consumption. The DA/AD "Approved" designation, which is the most stringent and, therefore, the most difficult to achieve, recognizes that the water is of sufficiently high quality to allow for direct consumption of shellfish from these beds without the requirement for relocation and depuration of the shellfish prior to human consumption (see map in Appendix D). Although many of Connecticut's marine waters are classified SA or SB/SA, the designated areas where suitable habitat exists and monitoring data documents the exceptionally good water quality necessary to receive an "Approved" designation by DA/AD are in fact limited. In general, the waters off Branford support approximately 46% of shellfishing areas approved for direct harvest in eastern Connecticut[8]. A more detailed description of the specific parameters and required criteria relating to authorization for direct harvest of shellfish is referenced

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the tissue, and eventually overwhelms the normal metabolic processes in the shellfish resulting in death.

[8] Statistics provided by Kelly Streich, DEP Water Bureau.

in the *Water Quality Standards* at page seventeen (Appendix A).

Water Quality Impacts and Habitat Alteration

The landward-most segment of pipeline, approximately 3500 feet, is proposed to be installed in-water from Juniper Point utilizing the horizontal directional drilling (HDD) method. At the HDD exit point a pit of approximate dimensions 18' deep x 130' wide x 310' long is proposed to be excavated. From this exit pit, a trench approximately 5' deep x 37' wide x 5520' long is proposed to be dredged to approximately Milepost 12. (A trench width of 37' is based on a 3:1 angle of repose.) The exit pit and 5520' long trench are proposed to be backfilled with bank-run gravel. From Milepost 12 for nine miles to the Connecticut/ New York state line, three passes of a sub-sea plow are proposed to: create a trench 5' deep x 25' wide at the top of slope; lay the pipe; and backfill previously sidecast sediment mounds. This proposed installation would include dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping.

These activities would result in negative impacts to both the water quality and substrate. Turbidity of the water column would be relatively short-term. When this material precipitates out of the water column, it will result in sediment deposition on the benthic substrate. At the request of the Town of Branford's Blue Ribbon Committee[9], John Roberge, P.E., LLC, prepared an assessment of sedimentation impacts associated with pipeline installation as modified by

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[9] A committee appointed by the Town of Branford First Selectman to review and comment on the Islander East application.

Islander East to mitigate sediment dispersion.[10] The following sediment deposition pattern was estimated in Mr. Roberge's study:

> 1 mm up to 100 meters from the trench centerline (approximately 70 acres); and 3 mm up to 40 meters from the trench centerline (approximately 35 acres).

The Department has determined that the negative impacts resulting from this depositional layer. in addition to direct substrate disturbance associated with dredging, plowing, backfilling, equipment anchoring, and anchor cable sweeping, are inconsistent with the Water Quality Standards. Pipeline installation would not only temporarily disturb water quality, it would permanently change the substrate and negatively impact the existing aquatic biota that depend on such substrate. The Connecticut Water Quality Standards define biological integrity as the ability of any aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of the natural habitats of a region. The combined assaults of direct habitat disturbance and temporary water quality impacts resulting in sediment deposition negatively impact the overall biological integrity of the Thimbles Islands ecosystem and are therefore inconsistent with Standard No. 1 of the Connecticut Water Quality Standards.[11]

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[10] See Appendix E for report dated May 5, 2003 with September 30. 2003 and February 4, 2004 amendments.

[11] Surface Water Quality Standard No. 1 - It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water

Pipeline installation through the Thimble Islands ecosystem will dramatically alter natural habitats and adversely impact the existing community of organisms. As discussed in a study entitled "Macrobenthic Community Structure Along The Proposed Islander East Pipeline Route In Long Island Sound," by Pellegrino[12], there are dramatic differences in community structure associated with a disturbed versus a non-disturbed substrate. Once the original bottom has been disturbed, a soft sediment, referred to as the nephloide layer, covers the bottom and fills in any depressions left on the disturbed surface. Thus, the high-order or late successional stage species such as clams and oysters that lived in the original substrate can no longer exist. The community structure of the original substrate changes to that of early-stage opportunistic species such as polychaete worms. It is uncertain whether the associated diverse assemblage of bottom dwelling organisms currently present in this area could be reestablished. No studies exist from which one may predict a known recovery time for both these benthic communities and the substrate, if, indeed, there is any significant recovery.

Antidegradation Policy

Connecticut's Water Quality Standards include an Anti-degradation policy[13] as required by the Act (see

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quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved.

[12] Appendix F, Final Report, January 2002, section 4.0.

[13] See Appendix A. *Water Quality Standards*. The Connecticut Anti-degradation Implementation Policy is found in Appendix E of *Water Quality Standards*.

Code of Federal Regulations, Title 40 Part 131.12). In brief, the policy requires that where water quality is better than the criteria established in the Water Quality Standards, such existing high quality must be maintained except under exceptional and very limited circumstances. In addition to addressing issues of quality, the policy mandates that existing uses must continue to be supported in all cases. Consistency with Connecticut's Anti-degradation Policy and the procedures established in the Water Quality Standards to implement the policy is required for all activities regulated by the Department and can serve as the primary basis for Section 401 certification decisions.

As previously described, the pipeline is proposed to be sited within and adjacent to extensive shellfish grants, leased shellfish grounds and public shellfish lands. The discharge of backfill associated with pipeline installation would result in approximately 5.5 acres of nearshore bottom habitat being permanently degraded and rendered unsuitable for supporting the diverse assemblage of shellfish and other bottom dwelling organisms currently inhabiting this area. Because the bank-run gravel would also interfere with harvesting techniques, the area of impact to shellfish harvesting would extend well beyond the 5.5 acres of direct disturbance. While the gravel-filled trench would be 37' wide, the area that the commercial shellfish harvesting equipment would need to avoid would be much wider because of the required turning radius of the vessels with gear in tow.

Additionally, the resulting topographic irregularities over the entire 3,700-acre Islander East corridor caused by sedimentation, backfill with gravel, plow utilization, anchor strikes, and cable sweeps will

adversely affect the population of resident benthic organisms and shellfish as well as the efficiency and safety of the existing shellfish harvesting operations and handling of shellfish harvesting equipment. The application materials indicate that it is the goal of the applicant to achieve a finished substrate equivalent to the adjacent benthic surface with a proposed acceptable tolerance of +2' to -1'. Based on the experience of the Department with the installation of the Iroquois pipeline in 1991, the Department does not agree that such a minimal impact restoration of the work site contours can, in practice be achieved. While such a range in tolerance level might be less significant in an area of lower environmental value. where shellfish resources were scarce due to lack of suitable habitat, or where traditional harvest shellfishing techniques were not employed, that is not the case in respect to the area through which the pipeline route has been proposed by Islander East.

Connecticut Coastal Management Act

In addition to meeting Water Quality Standards, Section 22a-98 of the General Statutes, the Connecticut Coastal Management Act ("CCMA"), requires that 401 Water Quality Certificates be consistent with the goals and policies of the CCMA. Due to the extensive scope and wide-ranging area within which work is proposed to be conducted by Islander East, there are a number of CCMA policies that are applicable to the project. The "coastal resources" which are in close proximity to the proposed work include: coastal waters, nearshore waters, offshore waters, islands, rocky shorefront, shellfish concentration areas, tidal wetlands, and general resources, as defined in General Statutes Section 22a-93(7). Each of these resources is associated with a set of

corresponding resource policies which constitute the enforceable policies of the CCMA. See Section 22a-92 of the General Statutes. In addition, specific coastal resources use policies (General Statutes Section 22a-92) and adverse impacts (General Statutes Section 22a-93(15)) are identified in the CCMA and must be used in conjunction with the applicable resource policies. See attached Objection of Coastal Management Consistency, dated July 29, 2003, to the Islander East Pipeline Company, LLC, for a more detailed analysis and discussion of the preceding resource issues and concerns.[14] The Department emphasizes that the proposed pipeline installation will adversely impact existing, water dependent uses. The enforceable policies of the CCMA mandate preference being given to water dependent uses, defined in Section 22a-93(16), and, in particular, to the priority development of particular water dependent uses such as commercial and recreational fishing. Moreover, the CCMA, Section 22a-93(17) defines "Adverse impacts on future water-dependent development opportunities" and "adverse impacts on future water-dependent development activities" to include the following situations that apply to the Islander East proposed pipeline route: "(A) locating a non-water-dependent use at a site that (i) is physically suited for a water-dependent use for which there is a reasonable demand or (ii) has been identified for a water-dependent use in the plan of development of the municipality or the zoning regulations; (B) replacement of a water-dependent

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[14] See Appendix G. In Section 22a-93(15), "Adverse impacts on coastal resources" specifically includes the degrading of water quality, the destruction of essential shellfish habitat and the alternation of the "natural components of the habitat."

use with a non-water-dependent use[.]" The area of impact lies in leased and designated shellfish beds, and, as detailed above, the impacts associated with the pipeline laying activities in the off-shore waters of the Sound will entail the destruction of that habitat area and the replacement of a water dependent use (commercial shellfishing) with a non water dependent use (pipeline installation for natural gas transmission).

Summary

The Department therefore finds that Islander East's proposed work is inconsistent with Connecticut's federally-approved Water Quality Standards. Due to the sensitive nature of the receiving waters and the ecological system dependent upon such water, the Department has determined that the regulated activity in the proposed location will permanently alter the existing high quality physical and biological integrity and productivity of this area to the extent that the existing uses for habitat for marine fish, other aquatic life and wildlife and shellfish harvesting for direct human consumption will be impaired. Essential shellfish habitat will be lost due to the temporary and permanent alteration of the benthic environment resulting from the proposed work. Finally, the siting of the non-water dependent pipeline through prime shellfish habitat would cause a significant and permanent adverse impact to a water-dependent use by displacing the water-dependent use of shellfishing with the non-water-dependent use of natural gas transmission.

Sincerely,

Arthur J. Rocque, Jr.
ARTHUR J. ROCQUE, JR.
Commissioner

AJR/slj

cc: Acting District Engineer, Brian A. Green, US Army Corps of Engineers

Magalie Salas, Federal Energy Regulatory Commission

Douglas Brown, NOAA/Office of Ocean and Coastal Resource Management

David Kaiser, NOAA/Office of Ocean and Coastal Resource Management

Bill O'Beirne, NOAA/Office of Ocean and Coastal Resource Management

Richard Blumenthal, Connecticut Attorney General

Robert Varney, EPA Regional Administrator, Region 1

Joseph C. Reinemann, Islander East Pipeline Company, LLC

APPENDIX E

UNITED STATES OF AMERICA
102 FERC ¶ 61,054
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, and
Nora Mead Brownell.

Islander East Pipeline Co.
Docket Nos. CP01-384-002
CP01-385-002
CP01-386-002

Algonquin Gas Transmission Co.
CP01-387-002

ORDER ON REHEARING
(Issued January 17, 2003)

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1. On September 19, 2002, the Commission issued a final order in this proceeding granting the requests of Islander East Pipeline Co. (Islander East) and Algonquin Gas Transmission Company (Algonquin) for authorization to construct and operate a new interstate pipeline to transport gas in Connecticut and Long Island.[1] Requests for rehearing were filed by Town of North Branford, Connecticut (North Branford); the Connecticut Attorney General (Connecticut AG); the Town of Branford, Connecticut, the Branford Land Trust, Edward M. Kennedy, Jr., and

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[1] Islander East Pipeline Company, L.L.C. (Islander East), 100 FERC ¶ 61,276 (2002).

Gina Rivezzi (jointly Branford); and Algonquin.[2] Additionally, numerous parties and individuals filed comments on the September 19 order and the final Environmental Impact Statement (EIS) issued in this proceeding. As discussed below, the requests for rehearing filed by North Branford, Branford, and the Connecticut AG are denied. Algonquin's request for rehearing is granted. Filed comments are also addressed below.

I. *Background*

2. Islander East proposes to construct and operate a pipeline that will extend from an interconnection with Algonquin's existing C-System near North Haven, Connecticut, across Long Island Sound and terminate near Brookhaven, New York on Long Island.[3] The new facilities will transport 260,000 Dth per day of natural gas on a firm basis to markets on Long Island, New York.[4] As part of the Islander East project, Islander East intends to lease certain facilities on Algonquin's C-System. Algonquin proposes to construct a new compressor station and other facilities to increase the capacity on its C-System to provide the service under the lease.

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[2] The Connecticut Commissioner of Environmental Protection (Connecticut DEP Commissioner) also filed a motion to intervene out-of-time and a request for rehearing.

[3] *See* Islander East, 97 FERC ¶ 61,363 (2001) for a more detailed description of the proposed project.

[4] Islander East's facilities are designed to transport the design capacity of 260,000 Dth per day on a firm daily basis and up to 285,000 Dth per day depending on actual conditions on Algonquin's C-System. *See* Islander East, 97 FERC at 62,698-99.

3. On December 21, 2001, the Commission issued a preliminary determination that found Islander East's proposal, subject to the environmental analysis, was in the public convenience and necessity.[5] On August 21, 2002, the Commission issued the Islander East Project final Environmental Impact Statement (EIS).[6] The final EIS, among other things, determined that there was an alternative, the ELI System Alternative, that was environmentally preferable because it had a shorter Long Island Sound crossing, avoided more shellfish leases, and would only have air quality and noise impacts onshore in Connecticut. The ELI System Alternative was based on a modification of the Eastern Long Island Extension Project (ELI Project)[7] that was proposed by Iroquois Gas Transmission System, L.P. (Iroquois) in Docket No. CP02-52-000.[8] However, the final EIS also deter-

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[5] Islander East, 97 FERC ¶ 61,363.

[6] The U.S. Environmental Protection Agency published a notice of availability of the EIS in the *Federal Register* on August 30, 2002.

[7] The ELI System Alternative includes the proposed ELI Project facilities, including the Milford Compressor Station, the route for crossing Long Island Sound and onshore portions in New York. The ELI System Alternative would also include an additional 10,000 hp to Iroquois' Brookfield Compressor Station and 5.6 miles of pipeline lateral equivalent to the Calverton Lateral proposed by Islander East. Iroquois' existing mainline facility currently crosses Long Island Sound. In essence, the ELI System Alternative will eliminate the need to construct facilities at the Connecticut shoreline.

[8] On September 19, 2002, the Commission also issued a Preliminary Determination in that proceeding. *See* Iroquois Gas Transmission System, L.P., 100 FERC ¶ 61,275 (2002). Subsequently, on October 4, 2002, Iroquois filed a motion requesting that the Commission defer consideration of its application in Docket No. CP02-52-000, among other things, to allow time for

mined that if the Islander East Project is constructed and operated as proposed by Islander East and Algonquin and in accordance with the recommended mitigation measures, it would be an environmentally acceptable action.

4. On September 19, 2002, the Commission issued an order on rehearing of the December 21 preliminary determination and a final order issuing Islander East and Algonquin authorization to construct their respective facilities. In the September 19 order, the Commission determined that while the final EIS found that the ELI System Alternative was environmentally preferable, the Commission's primary obligation under the NGA required that the Commission consider other factors to determine if the project was in the public convenience and necessity. First, as set forth in the December 21 Preliminary Determination, the proposed Islander East Project satisfies the non-environmental criteria of the Policy Statement[9] for determining whether the proposed project is required by the pubic convenience and necessity.

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market participants to consider and assess the "likelihood that the Islander East Project can promptly obtain the various other federal, state and local permits that are prerequisites for the construction of that project." Iroquois' motion to defer at 2. In response, the Director of the Office of Energy Projects granted the deferral and required that Iroquois file a status report on its plans to proceed with its proposed ELI Project by January 31, 2003.

[9] Certification of New Interstate Natural Gas Pipeline Facilities (Policy Statement), 88 FERC ¶ 61,227 (1999), *orders clarifying statement of policy*, 90 FERC ¶ 61,128 and 92 FERC ¶ 61,094 (2000).

5. In the September 19 order, the Commission also pointed out that the Islander East Project provided significant benefits that the ELI Project (and, similarly, the ELI System Alternative) did not. First, Iroquois is currently the only pipeline that provides direct access to Long Island. The proposed Islander East Project will provide Long Island with another source of supply, allowing this market to enjoy the benefits of pipeline-to-pipeline competition for the first time. More importantly, the September 19 order stated the proposed Islander East project will provide much needed security and reliability by providing a second facility to access supply in the event something happens to either of the pipeline facilities. Iroquois' proposed ELI Project (and the modified ELI System Alternative) cannot provide similar benefits.[10] Therefore, in the September 19 order, the Commission concluded that because the Islander East Project was an environmentally acceptable action and because it would provide significant benefits, it was required by the public convenience and necessity under the NGA.

6. The September 19 order also addressed several motions to consolidate the Islander East proceeding with Iroquois' ELI Project proceeding and addressed the impact of the Connecticut moratorium on the issuance of the Commission's September 19 order.[11]

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[10] Islander East, 100 FERC at para. 56.

[11] On April 12, 2002, the Governor of Connecticut issued Executive Order No. 26 that prohibits state agencies from approving any utility projects that cross Long Island Sound, among other things, until June 15, 2003. Similarly, on June 3, 2002, the Connecticut Legislature enacted Public Act No. 02-95, which imposed a one-year moratorium on utility crossings in Long Island Sound.

Concerning the requests for consolidation, the Commission found that the projects were not mutually exclusive under *Ashbacker Radio Corp. v. FCC (Ashbacker)*,[12] and did not require that the Commission conduct a comparative hearing.

7. The Commission stated in its September 19 order that if it did not issue the certificates at that time, it would have abdicated its responsibility to expedite necessary pipeline infrastructure to supply the future market needs of Long Island consumers. The Commission pointed out that while circumstances may develop such that Islander East cannot commence the service proposed on the currently projected timetable, it is not in the public interest to make that possibility a certainty by failing to move forward in this proceeding in a timely manner.

II. *Procedural Matters*

A. *Filings*

8. Numerous parties filed comments on the final EIS and the Commission's September 19 order. Algonquin, the Connecticut AG, North Branford, and Branford filed requests for rehearing. North Branford concurs with the Connecticut AG's request for rehearing. Branford adopts and incorporates by reference the arguments made by the Connecticut AG in its rehearing request. The Branford Land Trust, in addition to being a joint party in Branford's request for rehearing, separately filed a response with additional comments on the September 19 order. The Connecticut Commissioner of the Department of Environmental Protection (Connecticut DEP Commis-

[12] 326 U.S. 327, 329-31 (1945).

sioner) filed a motion to intervene out-of-time and a request for rehearing.

9. Islander East filed a motion for leave to file a reply and a reply to the requests for rehearing. While our rules do not permit answers to rehearing requests,[13] we may, for good cause, waive a rule.[14] We find good cause to do so in this instance. To ensure a complete and accurate record, we will accept Islander East's answer. Additionally, we note that on December 11, 2002, Islander East filed supplemental material that updated its agency consultations and correspondence related to the Islander East Project. Among other things, the filing includes Islander East's responses to a comment letter filed by the U.S. Environmental Protection Agency (EPA) on September 30, 2002, in response to the final EIS requesting further information concerning the Islander East Project.

10. On November 25, 2002, the Connecticut AG filed a motion for a stay of the Commission's September 19 order. On December 9, 2002, Islander East filed a reply to the Connecticut AG's motion. On December 13, 2002, Brookhaven Energy Limited Partnership filed an opposition to the motion. The motion for a stay is discussed below.

B. *Late Intervention*

11. The Connecticut DEP Commissioner argues that good cause exists to grant its motion for late intervention because the September 19 order is unprecedented and substantially interferes with the environmental review and permit process under the

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[13] *See* 19 C.F.R. § 385.213(a)(2).

[14] *See* 19 C.F.R. § 385.101(e).

Coastal Zone Management Act (CZMA) and Clean Water Act (CWA). It contends its intervention will not disrupt the proceeding because the issuance of a CZMA permit is a condition precedent to Islander East's ability to commence construction. It also states that its interest cannot be adequately represented by any other party because it is empowered to issue the CZMA permit.

12. The Connecticut DEP Commissioner also claims that granting late intervention will not prejudice others because the Commission's action in the September 19 order is legally unsupportable. Finally, it asserts that the September 19 order is the first definitive notice that the Connecticut DEP Commissioner received respecting the Commission's disposition towards its coastal consistency determination and that under the Administrative Procedure Act federal agencies must provide notice and opportunity for parties to be heard on substantive issues that potentially affect those parties.

13. In response, Islander East asserts that Commission precedent makes clear that when late intervention is sought after the issuance of a Commission order, "the prejudice to other parties and burden upon the Commission of granting late intervention may be substantial. Thus, movants bear a higher burden to demonstrate good cause for the granting of such late intervention."[15] Islander East contends that the Connecticut DEP Commissioner has not met this higher burden. It argues that the Connecticut DEP Commissioner has failed to raise any valid argu-

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[15] *Citing* Islander East, 100 FERC at para. 11, *citing* North Baja Pipeline L.L.C., 99 FERC ¶ 61,028 at 61,109-10 (2002).

ments as to why its motion to intervene should be granted despite its extreme lateness.

14. Islander East claims that the Connecticut DEP Commissioner's actions in this proceeding establish that it had notice long ago that its interests could be affected in this proceeding. Islander East points out that the Connecticut DEP Commissioner sought to protect those interests by filing comments on the draft EIS months ago, on May 17, 2002, thereby demonstrating that the Connecticut DEP Commissioner has had ample notice and opportunity to participate in this proceeding in a timely fashion.

15. Further, Islander East contends that there is no indication that the Connecticut DEP Commissioner's interests have not been adequately represented by other participants and parties to this proceeding. It states that in the motion, the Connecticut DEP Commissioner acknowledged that the Connecticut AG, which has already intervened in this proceeding, acts as the legal representative for Connecticut's executive branch agencies, including the Connecticut DEP Commissioner, and that the only way for the Connecticut DEP Commissioner to participate in this proceeding is through the Connecticut AG. Therefore, Islander East argues that the Connecticut DEP Commissioner has failed to demonstrate that its interests are not adequately represented by other parties.

16. Islander East also asserts that granting the request for late intervention for the purpose of requesting rehearing will disrupt the proceeding and place additional burdens on Islander East, the Commission, and the other parties to the proceeding. It contends that permitting the late intervention would effectively permit the Connecticut AG to enter the

proceeding twice, thereby sanctioning an attempt to manipulate the Commission processes to its own advantage, which is highly prejudicial to other parties. Finally, Islander East states that allowing the Connecticut DEP Commissioner party status in this proceeding at this late juncture, and thus affording it standing to pursue an appeal of the Commission's certificate order in federal court, would be highly prejudicial to Islander East because it could unduly delay the proceeding and Islander East's ability to serve its customers on a timely basis.

Commission Response

17. As Islander East points out, when late intervention is sought after the issuance of a Commission order, the prejudice to other parties and burden upon the Commission of granting the late intervention may be substantial. Thus, movants bear a higher burden to demonstrate good cause for the granting of such late intervention.[16] The Connecticut DEP Commissioner contends that good cause exists to grant its motion because the September 19 order is legally unsupportable, unprecedented, and interferes with the Connecticut DEP Commissioner's CMZA permit process.

18. The Commission routinely issues certificates for natural gas pipelines subject to the states' issuing CZMA permits.[17] In fact, in a case involving Connecticut in 1990, the Commission authorized Iroquois to construct its pipeline through Connecticut across

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[16] *See* North Baja Pipeline L.L.C., 99 FERC at 61,109-10.

[17] *See, e.g.*, Gulfstream Natural Gas System, L.L.C., 94 FERC ¶ 61,185 (2001); Florida Gas Transmission System, 90 FERC ¶ 61,212 (2000); Iroquois Gas Transmission System, L.P. (Iroquois), 52 FERC ¶ 61,091 (1990).

Long Island Sound conditioned on it filing proof that the responsible Connecticut agency concurred that the proposed facilities were consistent with its coastal zone management program.[18] Consequently, the Commission's action in the September 19 order is not unprecedented and does not interfere with the Connecticut DEP Commissioner's permitting process. Accordingly, we find that the Connecticut DEP Commissioner had sufficient notice and opportunity to intervene in a timely manner and has failed to demonstrate good cause to justify its request for late intervention. Therefore, its motion to intervene out-of-time is denied.

19. Islander East argues that if the Commission denies the motion for late intervention it must dismiss the Connecticut DEP Commissioner's request for rehearing. Because the Connecticut DEP Commissioner is not a party to the proceeding under Rule 102 of the Commission's regulations, it cannot request rehearing. However, we will address the concerns raised by the Connecticut DEP Commissioner as a request for reconsideration.

C. *Request for Stay*

20. On November 25, 2002, the Connecticut AG filed a motion for a stay of the September 19 order. Generally, it argues that recent rulings by the Commission and other state and federal agencies have had the effect of extending the administrative review process. Therefore, it contends that a stay is appropriate in order to preserve the *status quo* pending review, to prevent possible damage to important natural resources, and to avoid imposing unnecessary costs to the public as well as to Islander East.

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[18] Iroquois, 52 FERC at 61,454, Environmental Condition 48.

21. Specifically, the Connecticut AG states that there are at least four active or potential administrative proceedings pending. It contends that these include a CWA permit from the Connecticut DEP, an appeal of the coastal consistency denial to the United States Department of Commerce under the CZMA, future section 10 and 404 permit proceedings before the United States Army Corps of Engineers (COE), and a final rehearing determination from the Commission. It argues that any of these proceedings may result in extensive, post-administrative judicial review and that all permits must be obtained before the project is complete. Therefore, the Connecticut AG concludes that, as a consequence, it is clear that there will not be any substantive work in or under the Long Island Sound, or in or around critical inland wetland area, for an extended period of time, possibly years.

22. The Connecticut AG states that Islander East has notified the COE and several Connecticut citizens living along the proposed route that it intends to begin construction of the facilities on land during the Spring of 2003. The Connecticut AG states that the letters indicate that Islander East plans to employ its eminent domain authority to seize private land to begin work on the areas not within the Sound or existing wetlands.

23. The Connecticut AG alleges that it is premature for the private utility to commence construction without all regulatory approvals in place. It argues that once construction begins, not only does the company begin to incur substantial costs, but will also require that landowners incur irreversible and substantial impacts to their property. The Connecticut AG states that without a stay, the full ad-

verse affects may be imposed on the private homeowners long before the various state and federal authorities have completed their deliberations. The Connecticut AG contends that if one or more of the administrative or judicial authorities concludes that an environmentally preferable alternative exists to the proposed route, or otherwise determines not to approve "a project that permanently alters approximately 20 miles of seafloor and disturbs more than 500,000 cubic yard of sediment some of which is contaminated with pesticides and other toxic substances,"[19] such a determination will come too late for homeowners, who will have suffered serious disruption of their property.

24. The Connecticut AG also argues that state and federal law uniformly recognizes the importance of preserving real property rights. It contends that the power of eminent domain should never be used carelessly or unnecessarily. It asserts that there can be no credible justification for permitting a private company to use federal power to seize private property rights when it is doubtful, at best, that the proposed project will ever go forward.

25. In response, Islander East states that the Connecticut AG's motion is a request for extraordinary relief that is completely unsupported by fact or law and should be denied. It asserts that the Connecticut AG has not proved that it will suffer irreparable harm if the stay is denied. Islander East contends that the Connecticut AG has not presented any factual information suggesting that any legitimate interest of the State of Connecticut will if fact suffer an irreparable injury. It argues that while

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[19] Connecticut AG's motion for stay, at 4.

the Connecticut AG states that a stay of the order is appropriate until the administrative review is completed and the appropriate permits are received, it also points out that the Connecticut AG also recognizes that Islander East cannot work in or around Long Island Sound until it obtains the necessary permits. Therefore, Islander East claims that the Connecticut AG virtually concedes the absence of harm to property owned or held in trust by the state in absence of a stay.

26. Islander East argues that lacking a basis to argue that any legitimate interest of the State of Connecticut will be irreparably harmed, the Connecticut AG instead claims that private landowners will be irreparably injured. Islander East contends that even assuming, for argument sake, that the Connecticut AG could legally and legitimately assert harm to private landowners to support of its claim,[20] it has failed to specify what harm is likely to occur before the permits are issued, or even to identify the landowners who will be harmed. Islander East points out that the Commission order makes it clear that Islander East cannot proceed with construction of this project, including construction on private property, until it has received necessary and appropriate pemits.[21] Further, Islander East points out that while it continues to plan to begin construction of the pipeline sometime during the spring of 2003, it recognizes that it cannot begin such construction before it receives the appropriate permits.

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[20] *Citing* Iroquois Gas Transmission System, L.P., 54 FERC ¶ 61,103 at 61,341-42 (1991)(The Commission has held that "movant may not seek a stay based on injury suffered by a party other than the movant.")

[21] *Citing* Environmental Condition 42 and 43.

27. Islander East states that as permitted by the September 19 order, in the period prior to construction it is attempting to conduct engineering, environmental, and archeological surveys along its certificated route for the limited purpose of determining if minor deviations in the certificate route might be needed due to environmental or archeological conditions. It contends that such surveys are unlikely to damage property and would accordingly provide no basis for the Connecticut AG's claim that private property owners will suffer irreparable harm in the absence of a stay.

28. Islander East asserts that granting a stay would substantially harm Islander East, its shippers, and potential consumers in Long Island, Connecticut, and New York. It states that it is making every effort to complete the project so service can begin by November 2003, if it receives all necessary permits in time to make that feasible. It contends that the size and complexity of the project require substantial advance planning. Islander East states that if it is to have an opportunity to meet is goal of commencing construction during the spring of 2003 (assuming the appropriate permits have been obtained), it needs to conduct its preliminary surveys and prepare its reports now. Islander East claims that it needs the September 19 order to obtain access to the few remaining properties where access has been denied so that it can compete the surveys and reports.[22] It con-

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[22] *Citing* Iroquois Gas Transmission System, L.P., 52 FERC at 61,402 n.195 (The Commission has recognized that, in many instances, as in this case, a pipeline cannot obtain access to property to complete the detailed cultural resource field work needed by the National Historic Preservation Act until it has a certificate.)

tends that a stay would prevent Islander East from completing this essential preliminary work and unreasonably delay the project for no apparent reason.

29. Islander East also argues that the stay would not serve the public interest. It state that after conducing an extensive review, the Commission found that there is a real need for the Islander East project and concluded that it is required by the public convenience and necessity. Islander East also states that the Commission rejected the prior attempts by the Connecticut AG and others to delay or deny the issuance of the certificate. It contends that nothing has changed since the time the Commission issued the order. Therefore, Islander East asserts that a stay would not serve the public interest, but would instead make it more difficult for Islander East to complete the project on a timely basis so that it can provide much needed supplies to Long Island and New York. Islander East concludes that the Connecticut AG has failed to establish that the interest of the state or private Connecticut landowners would be irreparably harmed in the absence of a stay and, in contrast, that there is clear evidence that a stay will irreparably harm Islander East, its shippers, and potential customers. Therefore, it contends that the Commission should deny the motion for a stay.

30. In its opposition, Brookhaven states that the Connecticut AG's request for a stay must be rejected because it may cause substantial irreparable injury to all residents on Long Island. It states that the Islander East Project will benefit consumers on Long Island by providing a reliable source of natural gas deliveries for competitive prices required for the development of Brookhaven's 580 MW gas-fired generation facility. Brookhaven asserts that to the extent

the stay results in delaying the completion of the Islander East Project, consumers on Long Island will be deprived of the benefits of its Brookhaven Energy Facility, including projected reductions of harmful emissions of nitrogen oxides and sulfur dioxide on Long Island of approximately 1,283 tons per year and 678 tons per year, respectively. It also states that the generation facility will reduce the cost of electricity on Long Island by approximately $61 million per year.

Commission Response

31. In its consideration of motions for a stay, the Commission applies the standards set forth in Section 705 of the Administrative Procedure Act,[23] and grants a stay when "justice so requires."[24] In deciding whether justice requires a stay, the Commission generally considers several factors, which typically include: (1) whether the party requesting the stay will suffer irreparable injury without a stay; (2) whether issuing the stay may substantially harm other parties; and (3) whether a stay is in the public interest.[25] The Commission's general policy is to refrain from granting stays of its orders, in order to assure defi-

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[23] 5 U.S.C. § 705.

[24] *See, e.g.*, Clifton Power Corp., 58 FERC ¶ 61,094 (1992); United Gas Pipe Line Co., 42 FERC ¶ 61,388 (1988); Trinity River Authority of Texas, 41 FERC ¶ 61,300 (1987); City of Centralia, Washington, 41 FERC ¶ 61,028 (1987).

[25] *See, e.g.*, CMS Midland, Inc., Midland Cogeneration Venture Limited Partnership, 56 FERC ¶ 61,177 at 61,631 (1991), *affd sub nom.*, Michigan Municipal Cooperative Group v. FERC, 990 F.2d 1377 (D.C. Cir.), *cert denied.*, 510 U.S. 990 (1993); NE Hub Partners, L.P., 85 FERC § 61,105 (1998); Boston Edison Company, 81 FERC ¶ 61,102 (1997).

niteness and finality in Commission proceedings.[26] If the party requesting a stay is unable to demonstrate that it will suffer irreparable harm absent a stay, the Commission need not examine the other factors.[27]

32. Further, in *Wisconsin Gas v. FERC (Wisconsin Gas)*[28] the court developed several principles to determine if the requirement of irreparable harm has been met for a judicial stay:

> First, the injury must be both certain and great; it must be actual and not theoretical. Injunctive relief "will not be granted against something merely feared as liable to occur at some indefinite time." It is also well settled that economic loss does not, in and of itself, constitute irreparable harm. . . . Implicit in each of these principles is the further requirement that the movant substantiate the claim that irreparable injury is "likely" to occur. Bare allegations of what is likely to occur are of no value since the court must decide whether the harm will in fact occur. The movant must provide proof that the harm has occurred in the past and is likely to occur again, or proof indicating that the harm is certain to occur in the near future.[29]

33. We find that the Connecticut AG has not shown irreparable injury. First, as Islander East points out, it cannot commence construction of the facilities until it receives all necessary federal per-

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[26] *Id.* at 61,630. *See also*, Sea Robin Pipeline Company, 92 FERC ¶ 61,217 (2000).

[27] *Id.*

[28] Wisconsin Gas v. FERC, 758 F.2d 669 (D.C. Cir 1985).

[29] *Id.* at 674 (citations omitted).

mits, including federal permits issued by the State through its delegated authority.

34. Further, easement agreements negotiations and condemnation proceedings are lengthy procedures. One of the reasons the Commission issued the September 19 order was to give Islander East sufficient time to conduct preconstruction activities, including acquiring the necessary easements. Staying Islander East's right to eminent domain while it resolves preconstruction environmental conditions would needlessly delay the project. Moreover, any economic losses due to eminent domain proceedings, is not sufficient to constitute irreparable harm. Any potential court costs are speculative depending on Islander East's success and/or failure with its easement negotiations. Additionally, the Connecticut AG has not provided any proof of damages that may be associated with denying this stay and why those damages will not be recovered. To what extent landowners may incur costs or damages in condemnation proceedings is an issue that is determined by state law. Accordingly, we find that the Connecticut AG has not demonstrated that it will suffer any irreparable injury.[30] Therefore, its request for a stay is denied.

III. *Discussion*

A. *Rehearing Issues*

1. *Algonquin Lease Issues*

35. Section 1.3 of the Lease Agreement between Algonquin and Islander East reserves to Algonquin the right to use the lease capacity to the extent it is

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[30] Additionally, as Islander East points out, the injury must be an injury to the moving party. *See* at Iroquois, 54 FERC at 61,341-42.

not used by Islander East, by making it available under Algonquin's open access tariff.[31] In a footnote in the Preliminary Determination, the Commission pointed out that at the termination of the lease agreement Islander East would need to file for authorization to abandon the leased capacity and Algonquin would need to apply for a certificate to reacquire the capacity. On rehearing, Algonquin requested that the Commission clarify that the imposition of such requirements did not prohibit Algonquin from offering that capacity for use under its open access tariff during the term of the lease to the extent Islander East did not fully use it.

36. In the September 19 order, the Commission stated that a lease was an acquisition of a property interest and that any available capacity is subject to the capacity release requirements of the lessee's tariff. Therefore, Algonquin does not have any rights to use the lease capacity for interruptible service. On rehearing, Algonquin states that the Commission erred by imposing new restrictions on the use of the leased capacity.

37. To support its request, Algonquin cites to the Commission's long-standing policy by which a lessor pipeline could provide service through leasehold facilities under its open access tariff to the extent that the lessee pipeline was not using that capacity.[32] It

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[31] Specifically, Section 1.3 of the Lease Agreement states, among other things, that "[s]ubject to Islander East's rights, . . . Algonquin shall have the right to utilize for secondary firm or interruptible service any capacity in the C-System that is not used by Islander East on a firm or interruptible basis."

[32] *Citing* Texas Eastern Transmission Corp., 87 FERC ¶ 61,325 (1999); Columbia Gas Transmission Corp., 78 FERC ¶ 61,030 (1997).

also cites to the Commission's order on remand from the U.S. Court of Appeals from the D.C. Circuit, in response to concerns that permitting pipelines to acquire capacity on other pipelines may lead to anti-competitive or unduly discriminatory behavior.[33] Algonquin states that in that order the Commission stated that adequate protections are in place to protect from such a result because "the acquiring capacity must be subject to the Commission's Open-Access Rules at all times. This means among other things, that unused capacity will be subject to the capacity release provisions of the acquiring pipeline's tariff or may be sold on an interruptible basis by the offsystem [*i.e.* lessor] pipeline."[34] Algonquin contends that, notwithstanding this precedent, in the September 19 order, the Commission changed this policy without justification or explanation.

38. We find Algonquin's argument persuasive. The Commission believes that allowing Algonquin to use the capacity on an interruptible basis will encourage the efficient use of interstate pipeline facilities. Accordingly, upon reconsideration, we find that under Section 1.3 of the lease agreement, Algonquin may use the available capacity that is not used by Islander East on an interruptible basis. We note that to the extent Algonquin uses any capacity made available on the proposed facilities, it must do so in accordance with its tariff or other Commission authorization. Algonquin's request for rehearing is granted.

2. *Incomplete Environmental Review*

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[33] Texas Eastern Transmission Corp., 93 FERC ¶ 61,273 (2000).

[34] Algonquin's rehearing request at 7, *quoting Id.*, at 61,866.

39. On rehearing, the Connecticut AG asserts that the Commission issued a certificate without completing the necessary environmental studies mandated under NEPA. Therefore, it claims the certificate is premature. The Connecticut AG argues that numerous environmental conditions recognize that significant information has not yet been prepared that would allow for a complete or reasonably accurate picture of the potential environmental impacts to be presented for review. The Connecticut AG specifically refers to the requirement that Islander East conduct further modeling to adequately determine near shore areas that should be monitored for potential sedimentation impacts. The Connecticut AG also cites to other various requirements for additional studies, including studies to determine blasting affects on contaminated groundwater in North Branford and the requirement that Islander East complete Historic Preservation Act investigations and reports. Finally, it cites to the EPA's comments filed on the final EIS. It argues that in view of the numerous effects of this project on the ecosystem of the Long Island Sound and the lack of even basic information, it is premature to certify this project.

40. In response, Islander East states that although the Commission imposed conditions requiring Islander East to conduct additional studies, prepare additional reports and submit information to the Commission, the use of such conditions is fully consistent with the Commission's longstanding practice and requirements of NEPA.[35] It argues that the Commission has rejected claims in other cases that every detail of construction and implementation must be

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[35] *Citing* Iroquois Gas Transmission System, L.P., 52 FERC at ¶ 61,402 n. 195.

reviewed and approved prior to certification, noting that such an approach would impose "an unnecessary and unreasonable burden that would preclude the timely construction of most major projects."[36] It states that the conditions the Commission has imposed will ensure that, before Islander East can begin construction, it has fully satisfied all the requirements the Commission has found necessary to ensure environmental compliance.

Commission Response

41. Under NEPA, the purpose of an EIS is to ensure that an agency, in reaching its decisions, will have available and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audiences that may also play a role in both the decision making process and the implementation of that decision.[37] The EIS prepared by Commission staff for Islander East sets forth the information necessary to achieve those purposes.

42. Consistent with long-standing practice, and as authorized by NGA section 7(e), the Commission typically issues certificates for natural gas pipelines subject to conditions that must be satisfied by an applicant or others before the grant of a certificate can be effectuated by constructing and operating the nascent project.[38] As is the case with virtually every

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[36] *Citing* Millennium Pipeline Company, L.P., 100 FERC ¶ 61,277 at para. 144 (2002).

[37] *See* Robertson v. Methow *Valley Citizens Council*, 490 U.S. 332, 349 (1989).

[38] Section 7(e) of the Natural Gas Act provides that "[t]he Commission shall have the power to attach to the issuance of

certificate issued by the Commission that authorizes construction of facilities, the instant approval is subject to Islander East's compliance with the environmental conditions set forth in the order.

43. The practical reality of large projects such as Islander East is that they take considerable time and effort to develop. Perhaps, more importantly, their development is subject to many significant variables whose outcome cannot be predetermined. For example, as is the case in this proceeding, many individuals have denied or limited Islander East's access to property that it needs to complete its surveys and environmental studies. Depending on state law, the pipeline needs NGA section 7 certificate authorization, including eminent domain authority under NGA section 7(h), to access this property.

44. The natural consequence of this is that some aspects of a project may remain in the early stages of planning even as other portions of the project become a reality. If every aspect of the project were required to be finalized before any part of the project could move forward, it would be difficult, if not impossible, to construct the project. Here, the Commission processed Islander East's application and issued it a certificate under the requirements of the NGA and

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the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require." *See also* Iroquois Gas Transmission System, L.P., 52 FERC at 61,402 n. 195 (the Commission has a longstanding practice of issuing certificates conditioned on the completion of environmental work or the adherence by the applicants to environmental conditions)(*citing* Texas Eastern Gas Transmission Corp., 47 FERC ¶ 61,341 (1989); CNG Transmission Corp. 51 FERC ¶ 61,267 (1990); Columbia Gas Transmission Corp. 48 FERC ¶ 61,050 (1989).

NEPA. The exercise of that authority was conditioned on the pipeline's completing the necessary survey and environmental studies. As such, we find that the final EIS contains sufficient information for the Commission to determine under NEPA that the proposed Islander East Project is an environmentally acceptable action. Therefore, the issuance of a certificate of public convenience and necessity to Islander East to construct and operate the facilities under the NGA is not premature. The Connecticut AG's request for rehearing on this issue is denied.

3. *Alternatives*

45. The Connecticut AG contends the order fails to comply with NEPA and the NGA because it does not include consideration of all reasonably foreseeable alternatives.[39] It states that one of the guiding principles of NEPA is that federal agencies presented with multiple alternatives to accomplish and identified public need must evaluate them rigorously.[40] It contends that much of the information to conduct the analysis does not exist. Specifically, it states that the final EIS fails to consider the proposed Blue Atlantic Pipeline. It contends that Islander East's stated goals to satisfy the natural gas markets on Long Island and to provide greater system reliability, diversity of supply, and increased competition can be met by a number of alternatives that are simply absent from the EIS. Therefore, it claims the document is incomplete.

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[39] *Citing* Mississippi River Basin Alliance v. Westphal, 230 F.3d 170, 175 (5th Cir. 2000).

[40] *Citing* Custer County Action Ass's v. Garvey, 256 F.3d 1024, 1039 (10th Cir. 2001).

46. On rehearing, Islander East states that the Commission fully satisfied its responsibilities under NEPA by identifying the reasonable alternatives to the Islander East Project and taking a "hard look" at the environmental effect of approving the project. It points out that the final EIS identified six system alternatives to the Islander East Pipeline Project. It states that the Commission eliminated five of these six alternatives from consideration because they were not reflected in filings pending before the Commission, did not meet the Islander East purpose of enhancing supply diversity and reliability, could not meet the Islander East in-service date of November 1, 2003, and/or did not offer significant environmental benefits. The sixth, the ELI System Alternative, was identified as being environmentally preferable to the Islander East Project, even though this hypothetical system alternative would also require comparatively more compression, resulting in increased noise levels and air emissions.

Commission Response

47. In the September 19 order, citing *MidCoast Interstate Transmission Inc. v. FERC (MidCoast)*,[41] the Commission pointed out that NEPA requires that the Commission identify the reasonable alternatives to the contemplated project and look hard at the environmental effects of its decision.[42] As Islander East points out, the final EIS contained an extensive analysis of what the Commission staff determined were the foreseeable, reasonable alternatives.

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[41] 198 F.3d 960 (D.C. Cir. 2000).

[42] Islander East, 100 FERC at para. 98.

48. The Connecticut AG specifically claims that the alternative analysis is defective because it failed to consider the proposed Blue Atlantic Pipeline. On October 2, 2001, El Paso Corporation (El Paso) announced it plans to develop an approximately 750-mile subsea pipeline from Nova Scotia to New York and New Jersey.[43] El Paso is currently conducting engineering studies for the potential pipeline. As the Connecticut AG points out, much of the information to conduct the analysis presently does not exist. Without additional information, any evaluation of the Blue Atlantic Pipeline would be highly speculative and would lack the detail essential for assessing its impact or conducting a meaningful alternative comparison with other projects. NEPA does not require that the Commission consider potential effects (or alternatives) that are highly speculative or indefinite.[44]

49. Even assuming, for argument sake, the Commission could conduct an analysis of the Blue Atlantic Pipeline, it would not qualify as a reasonable alternative because it cannot meet the purpose of the Islander East Project. As currently proposed, the Blue Atlantic Pipeline will serve markets in New York City. If the pipeline is constructed, it will not be in service until 2005. Further, it is not self evident that a 750-mile subsea pipeline would necessarily offer any significant environmental benefits over the 50-mile Islander East Project, other than the fact that, as presently proposed, it will not be located in Connecticut or Long Island Sound. Finally, we note that pipeline companies consider and analyze poten-

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[43] *See* http://www.blueatlantic.net/

[44] *See* Kleppe v. Sierra Club, 427 U.S. 390 (1976); Sierra Club v. Marsh, 769 F.2d 868 at 878 (1st Cir. 1985).

tial projects regularly that do not always evolve to fruition. Accordingly, we find that the Blue Atlantic Pipeline is not a reasonable alternative that warranted an analysis in the final EIS. We also find that the final EIS considered all reasonably foreseeable alternatives, as required by NEPA. The Connecticut AG's request for rehearing on this issue is denied.

50. In its request for rehearing, the Connecticut AG cites to three cases to support its contention that the Commission failed to conduct a proper alternative analysis of need under NEPA.[45] However, these cases support only the principle that NEPA requires agencies to conduct a rigorous analysis of alternatives, which the Commission did in this case. In each case the courts found that the agencies had satisfied NEPA requirements.[46]

4. *ELI System Alternative*

51. In the September 19 order, the Commission explained that under the NGA it is required to make decisions concerning the public interests of energy consumers on a national basis. The Commission determined that the proposed Islander East Project was preferable over the ELI System Alternative because it would increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources with increased availability of gas for anticipated electric generation projects. Further,

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[45] Specifically, it cites to Custer County Action Ass'n. v. Garvey (Custer), 256 F.3d 1024 (10th Cir. 2001); Mississippi River Basin Alliance v. Westphal (Mississippi River), 230 F.3d 170 (5th Cir. 2000); and Morongo Band of Mission Indians v. FAA (Morongo), 161 F.3d 569 (9th Cir. 1998).

[46] *See* Custer, 256 F.3d at 1039; Mississippi River, 230 F.3d at 170; and Morongo 161 F.3d at 575.

it will introduce pipeline-to-pipeline competition to Long Island markets.[47] Subsequently, in explaining the Commission's mandate under the NGA and NEPA the Commission referred to the court's rulings in *State of Louisiana v. FPC*, that found that NEPA simply adds a secondary responsibility that mandates that the Commission consider the environment in carrying out is statutorily mandated duties.[48]

52. On rehearing, the Connecticut AG contends that the Commission ignored its conclusion that the ELI System Alternative was environmentally preferable and in referring to Commission's reference to the court's ruling in *State of Louisiana v. FPC*, the Connecticut AG argues that the Commission's "absurd conclusion that NEPA means only that the agency must merely consider the environment while remaining free to ignore its own conclusions is completely unlawful."[49]

53. The Connecticut AG states that NEPA is not a suggestion; it is a federal law and each agency must adhere to its defined procedures. The Connecticut AG argues that NEPA procedures expressly mandate that federal agencies consider the environmental impacts of their projects and consider reasonably foreseeable alternatives in order to further the clearly defined policy to "attain the widest range of beneficial uses of the environment without degradation."[50] The Connecticut AG contends that a comparative evaluation in this case is the only logical means of meeting this requirement and it is arbitrary and capricious

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[47] Islander East, 100 FERC at para. 74

[48] 503 F.2d 844 at 876 (1974).

[49] Connecticut AG's rehearing request, at 12.

[50] *Citing* 42 U.S.C. § 4331.

not to do so. Similarly, the EPA also questions why the ELI System Alternative was not the preferred alternative.

Commission Response

54. Immediately after citing to the court's decision in *State of Louisiana v. FPC*, in the September 19 order the Commission also cited to a Supreme Court quote in the *Midcoast* decision that found that:

> NEPA itself does not mandate particular results, but simply prescribes the necessary process. If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs. . . . All that is required is that the agency "identify the reasonable alternatives to the contemplated action" and "look hard at the environmental effects of [its] decision."[51]

55. The order went on to explain that Islander East's application demonstrates, as stated, that its proposed project will provide much needed competition and reliability that the ELI System Alternative and Iroquois' ELI Project cannot. It also stated that the New York Public Service Commission (PSC) prefers the Islander East Project because it will provide another source of delivery to Long Island. Moreover, the order pointed out that the final EIS determines that Islander East's proposed project is an environmentally acceptable action. Therefore, the Commission determined that the public convenience and ne-

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[51] Midcoast Interstate Transmission v. FERC, 198 F.3d at 967 (2000), citing, Robertson v. Methow Valley Citizens Council, 490 U.S. 332 at 350 (1989) and Corridor H Alternatives, Inc. v. Slater, 166 F.3d 368 at 374 (D.C. Cir. 1999).

cessity require that the Islander East's project be approved.

56. It appears that the Connecticut AG is confusing the Commission's mandate under the NGA with the procedural requirements of NEPA. In certificate proceedings, the Commission's primary responsibility under the NGA is to determine if the proposed facilities are required by the public convenience and necessity. The term public convenience and necessity connotes a flexible balancing process, in the course of which all the factors are weighed prior to final determination.[52] The Commission's obligation is to weigh all relevant factors in exercising its responsibilities under the NGA. A flat rule making one factor dispositive in the certificate decision is contrary to the Commission's responsibility to consider and balance all relevant factors.[53] Thus, although the final EIS finds, solely from an environmental standpoint, that the ELI System Alternative is the preferred environmental alternative to Islander East's proposal, that factor is not the end of our inquiry into the public convenience and necessity.[54]

57. The Court of Appeals for the District of Columbia Circuit stated that:

> NEPA's requirements are essentially procedural; as long as the agency's decision is fully informed and well-considered, it is entitled to judicial deference and a reviewing court should not sub-

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[52] FPC v. Transcontinental Gas Pipe Line Corp., 365 U.S. 1, 23 (1961).

[53] *Id.* at 23-24.

[54] *See* City of Pittsburgh v. FPC, 237 F.2d 741 at 751 n.28 (D.C. Cir. 1956).

> stitute its own policy judgment. Nevertheless, the court should ensure that the statement contains sufficient discussion of the relevant issues and opposing viewpoints to enable the decisionmaker to take a hard look at environmental factors, and to make a reasoned decision.[55]

NEPA does not mandate a particular result. Therefore, it does not automatically require that the Commission certificate the environmentally preferred alternative. The environmental analysis conducted in the final EIS is neither the end of the Commission's inquiry into the public convenience and necessity under the NGA nor an impediment preventing it from issuing Islander East a final certificate for the proposed route.

58. As discussed in the September 19 order, the Commission prepared an EIS to identify the reasonable alternatives to Islander East's proposal and to look hard at the environmental effects of approving that project. The final EIS determined that although there was an environmentally preferable alternative, Islander East's project would be an environmentally acceptable action under NEPA, if constructed and operated in accordance with the recommended mitigation measures. The Commission conditioned its certificate authorization on Islander East's compliance with the mitigation measures in the final EIS, as well as other measures discussed in the September 19 order.

59. Based on that conclusion, the Commission balanced the environmental impact of the proposed projects along with all the other relevant factors that it

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[55] National Resources Defense Council, Inc. v. Hodel, 865 F.2d 288, 294 (D.C. Cir. 1988) (quotations and citations omitted).

looks at in exercising its review under the NGA. As stated in the September 19 order, under the NGA, the Commission is required to make decisions concerning the public interests of energy consumers on a national basis. The proposed Islander East and Algonquin Projects increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources with increased availability of gas for anticipated electric generation projects. Further, it will introduce pipeline-to-pipeline competition to eastern Long Island markets.[56] In approving the proposed pipeline, the Commission also reviewed the precedent agreements filed by Islander East and various market studies to determine that there was sufficient long and short-term market demand to support to proposed project. Additionally, in the December 21 Preliminary Determi nation, the Commission determined that the pro-

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[56] In *Midcoast*, the court specifically upheld the Commission's policy of promoting competition. The court found that the Commission:

> was entitled to take competition into consideration in determining whether to approve Southern's certificate application. The agency had developed a long-standing policy of favoring competition in natural gas markets, and it had identified the benefits that it believed competition throughout that market would afford consumers, and adopted industry-transforming rules aimed at securing them. [The Commission] was entitled to rely on the general economic theory that introduction of competition to the market will benefit consumers. 198 F.3d at 968, citing Kansas Power and Light Co. v. FERC, 891 F.2d 939, 942 (D.C. Cir. 1989) and Associated Gas Distribs. v. FERC, 824 F.2d 981, 1008-09 (D.C. Cir 1987)("Agencies do not need to conduct experiments in order to rely on . . . predictions that competition will normally lead to lower prices.")

posed Islander East Project is consistent with the Policy Statement's criteria.

60. We also note that while the final EIS determined that the ELI System Alternative was environmentally preferable, it is a hypothetical pipeline with no pending application before the Commission.[57] Further, it does not meet the pipeline goals of providing flexibility and reliability. As a general matter, the Commission usually determines that an alternative that cannot meet the proposed project's stated objectives is not a viable alternative. It is not unreasonable for the Commission to reject an alternative because it did not meet the objectives of a project.[58]

61. The Commission also reviewed the filings made by Islander East's proposed customers and the New York PSC emphasizing the need for a totally separate sound crossing to provide contingency protection for both gas and electric systems against a total loss of supply if damage were to occur to the Iroquois line. As stressed in the September 19 order, KeySpan alone currently serves approximately 1.8 million customers, most of whom are residential and small commercial customers who use natural gas for life sustaining uses such as heating and cooking. Any disruption of existing firm service from Iroquois for any significant period could require KeySpan to curtail service to approximately 124,000 customers on Eastern Long Island. Such curtailments would have a significant and possibly disastrous impact.

62. Accordingly, after taking the hard look required by NEPA, the Commission concluded, under

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[57] *See supra* n.6.

[58] *See e.g., City of Alexandria, Virginia v. DOT*, 198 F.3d 862 (D.C. Cir. 1999).

the NGA, that the other values of the proposed project outweighed what the final EIS described as the project's limited, but acceptable, environmental costs. As such, it determined that, under the NGA, it was required by the public convenience and necessity to approve the Islander East project. The Connecticut AG's request for rehearing on this issue is denied.

5. *Consolidation / Competition Arguments*

a. *Connecticut AG's*

63. In the September 19 order, the Commission determined, after doing an analysis under *Ashbacker Radio Corp. v. FCC (Ashbacker)*,[59] that the Islander East and Iroquois ELI Projects were not mutually exclusive and did not require that the Commission conduct an *Ashbacker* hearing. The order also stated that NEPA's requirement of alternative analysis, by itself, does not trigger a comparative hearing.

64. On rehearing, the Connecticut AG contends that it appears that the primary reason that the Commission has decided not to consolidate the proceeding or perform a comparative project analysis is that the Commission believes that this course will foster competition and allow the market and not government regulators to decide which project is best. The Connecticut AG states that "not only does the Commission violate and ignore NEPA by failing to provide a full environmental impact and alternatives analysis, but, by approving Islander East without a valid comparison analysis under the NGA, the Commission is actually subverting the market by approving the first, and worst, project before it."

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[59] 326 U.S. 327, 329-31 (1945).

65. The Connecticut AG claims that the record shows that this action will result in the demise of a competitor's better alternative which is merely a few months behind in the regulatory process and effectively denies the public the opportunity to exercise any choice, and actively interferes with the proper functioning of the market. The Connecticut AG challenges the Commission's conclusion that the Iroquois and Islander East projects will serve different shippers and that the market is sufficient to approve both projects. It contends that the Commission erred because there is unchallenged evidence in the record that Iroquois will not construct its pipeline if Islander East builds its project. Therefore, the Connecticut AG concludes that the two projects are mutually exclusive and in no circumstances will both be completed.

66. The Connecticut AG concludes that the Commission has effectively forced Iroquois out of the playing field and denied it any review. It argues that the fact that Iroquois requested deferral of its project because of the Commission's action reinforces its argument. It also argues that as a practical matter, the Commission intruded into the marketplace and arbitrarily designated the first project in line as the only one to be built. Additionally, the Connecticut AG claims that by failing to consider the ELI System Alternative as a viable project alternative, the Commission has effectively designated what its own staff acknowledges is the most destructive proposal as the preferred proposal.

67. In response, Islander East states that the Ashbacker doctrine only requires the Commission to hold a comparative hearing when two *bona fide* applications would in fact be mutually exclusive. It asserts that the Commission properly concluded that

the Islander East and Iroquois ELI Projects were not mutually exclusive. It also contends that, contrary to the Connecticut AG's assertion, the D.C. Circuit has held that the fact that a pipeline may be at an economic disadvantage because another pipeline filed its application first and was certificated earlier would not make the *Ashbacker* doctrine applicable.[60] It also asserts that, contrary to the Connecticut AG's claim that the Commission erred in its decision to allow the market to determine which of the projects are best suited to serve a particular area, the court also stated that it did not understand how the Commission could determine the public interest without taking market forces into account.[61]

Commission Response

68. In the September 19 order, the Commission extensively compared the facts in this proceeding to those in the *ANR Pipeline Co. (ANR)* proceeding that was affirmed by the court in *ANR Pipeline Co. v. FERC*.[62] On rehearing, the Connecticut AG does not provide any legal analysis or evidence that contests the Commission's reliance on that case for support here. It does not distinguish the facts in this proceeding from those in *ANR*. Nor does it explain why the court's ruling in that case should not be applied here. In essence, the Connecticut AG simply reiter-

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[60] *Citing* ANR Pipeline Co., 205 F.3d 403 at 406 (D.C. Cir. 2000).

[61] *Id.*

[62] ANR Pipeline Co. (ANR), 78 FERC ¶ 61,326 (1997), *order issuing certificate and denying reh'g*, 85 FERC ¶ 61,056 (1998), *affirmed*, ANR Pipeline Co. v. FERC, 205 F.3d 403 (D.C. Cir. 2000). In fact, Iroquois' arguments in its request for consolidation essentially mirrored those made by ANR in its proceeding.

ates arguments made in its previous filings that the Commission dismissed in the September 19 order, without any additional legal support.

69. As stated, the Connecticut AG contends that the Commission decided not to hold a comparative hearing based solely on the Commission's belief that the project will foster competition and to allow the market to decide which project is best.[63] To the contrary, as discussed at length in the September 19 order, based on Commission and court precedent, the Commission determined that the two projects differed in many terms, including customer beneficiaries and intended benefits. Therefore, the projects were not mutually exclusive and did not require a comparative hearing under the *Ashbacker* doctrine.

70. The Connecticut AG argues that the two projects are mutually exclusive because Iroquois has stated that it will not construct its project if Islander East is built. As stated in the September 19 order, *Ashbacker* does not require that the Commission intervene in order to resolve a business competition that would ultimately decide that the better part of discretion is to withdraw from the field.[64] Additionally, in the September 19 order, the Commission thoroughly reviewed Iroquois' and Islander East's proposed customers and determined that they were not mutually exclusive.[65] Other than the statement

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[63] The Connecticut AG also argues that the Commission's decision not to consolidate the proceedings violates and ignores NEPA. Again, the Connecticut AG is confusing the Commission's mandate under the NGA and NEPA. The Commission's obligation under NEPA is discussed in the previous two sections. Therefore, we will not revisit that issue here.

[64] Islander East, 100 FERC at para. 42.

[65] *Id.* at para. 53 and 54.

that "there is unchallenged evidence in the record that Iroquois will not construct its pipeline,"[66] the Connecticut AG provides no argument contesting the Commission's analysis of potential shippers on the two projects.

71. The Connecticut AG claims that the Commission has effectively forced Iroquois out of the playing field by denying it any review. To the contrary, the Commission was in the process of reviewing its application and issued a preliminary determination on its ELI Project concurrent with its September 19 Islander East order.[67] Whether Iroquois determines it wants to continue to pursue its ELI Pipeline Project is a business decision that the Commission leaves to the pipeline to make. Further, we note that in *ANR v. FERC*, the court specifically addressed a situation in which the competing pipeline's applications were not on the same completion schedule and where the pipeline approved second may have to delay "building its pipeline extension only when sufficient demand justifies it, or when it can effectively wean existing customers away from" the other competing pipeline. It stated that:

> To be sure, this leaves ANR at something of a disadvantage, for the Nautilus pipeline is already in place and serving customers, because Nautilus filed its application first. So it might

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[66] *Id.* at para. 14

[67] On October 4, 2002, Iroquois filed a motion requesting that the Commission defer consideration of its application in Docket No. CP02-52-000 to, among other things, allow time for market participants to consider and assess the "likelihood that the Islander East Project can promptly obtain the various other federal, state and local permits that are prerequisites for the construction of that project." Iroquois' motion to defer at 2.

> be thought that the short-term difficulty of competing with an incumbent pipeline makes the two pipelines in some sense exclusive. But FERC seems at least implicitly to have concluded that this kind of economic disadvantage is different from a situation in which economic factors make it possible to grant only one license, so that *Ashbacker* does not apply here. We think its judgment was reasonable.[68]

72. Accordingly, we find that the Connecticut AG has not provided any new evidence or arguments that would warrant a finding that the Islander East and Iroquois projects are mutually exclusive. The Connecticut AG's request for rehearing on this issue is denied.

b. *Branford Land Trust's Arguments*

73. In its comments, the Branford Land Trust states that the Commission's competitive analysis inexplicably ignores the existing Transco pipeline, which can currently deliver up to 489,000 Dth of natural gas per day from New Jersey to southwestern Nassau County. Therefore, it concludes that Long Island already enjoys the market competition and system redundancy that supported the reasons for preferring the Islander East Project.

74. The Branford Land Trust also contends that the Islander East project will threaten market diversity rather than enhance it. It states that the Commission's decision fails to recognize or account for the deleterious effect on competition allowing one of Islander East's largest customers of gas on Long Island, KeySpan, to obtain a controlling interest in Is-

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[68] *ANR v. FERC*, 205 F.3d at 406.

lander East that will provide Long Island with gas pipeline capacity that is greatly in excess of the market demand. It states that this vertical integration could allow KeySpan to engage in anticompetitive behavior by undercutting its competition. It argues that if the Commission were truly concerned about enhancing market forces it would be working to separate the financial interests of the pipeline companies and the downstream customers, not consolidate them.

Commission Response

75. As stated, the Branford Land Trust states that the Commission ignored the existing Transco pipeline that currently delivers gas from New Jersey to southwestern Nassau County. Transco's existing pipeline does not interconnect with KeySpan's facilities on eastern Long Island. Therefore, it is not a competitive alternative to Iroquois' existing mainline facility.

76. Branford Land Trust also argued that the Commission failed to recognize the "deleterious" effect on competition that allowing Islander East's largest customer, KeySpan, to have a controlling interest on Islander East would have. Branford Land Trust's argument is unsupported by any actual evidence. ANR raised a similar affiliate abuse argument in *ANR v. FERC*.[69] There the court found nothing inherently suspicious about the vertical integration of the affiliated companies.

6. *Diversity of Supply*

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[69] 205 F.3d 403.

77. In the September 19 order, the Commission determined that the Islander East pipeline will, among other things, offer greater access to gas supply sources. On rehearing, the Connecticut AG contends that the Commission erred in determining that the Islander East Project will provide an additional diversity of supply. It states that in fact the gas in question comes from essentially one source, Sable Island. It contends that gas from Sable Island reaches southern New England through existing regional pipelines. It argues that both the Iroquois and Islander East projects are merely short, local taplines which change nothing in the regional picture except to shift a portion of natural gas supplies from Connecticut to Long Island. It states that both the Islander East and Iroquois pipelines will move gas from Connecticut to Long Island, therefore either line will have potential adverse consequences to Connecticut ratepayers by reducing a supply of natural gas in the State. The Connecticut AG cites to independent regulators that have described the supply situation in New England as "tight-as-drum" and noted that inducing "additional demand stress . . . competing for the existing delivery capacity of New England's pipelines has potentially ominous strategic implications for the security of New England's power supply."[70]

78. The Connecticut AG states that the Commission appears to recognize the burden and lack of benefit to Connecticut citizens when it states '[t]he fact that Algonquin's existing customers and Connecticut residents may not appear to benefit from the

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[70] *Citing* Connecticut AG's January 18, 2002 rehearing request *citing* Steady-State Analysis of New England's Interstate Pipeline Delivery Capacity 2001-2005.

proposed projects does not mean that the proposed project's benefits do not outweigh any potential adverse impacts."[71] It argues that it is arbitrary and capricious to conclude that a project has a valid public benefit when it connects the markets of two states but brings no benefit to one and actually decreases supply and "ominously induces demand stress . . . for the existing delivery capacity for the entire New England region."[72]

Commission Response

79. Currently, natural gas and gas-fired electric generation facilities located in Suffolk County, New York and eastern Long Island are only served by Iroquois' existing pipeline. After Islander East is constructed, those eastern Long Island facilities will have two supply sources, Iroquois and Islander East. Accordingly, on a micro basis, once Islander East is constructed natural gas users in Suffolk County will have an additional source of natural gas supplies.

80. On a macro basis, as presently configured, Iroquois provides access to natural gas supplies from Canada. Once Islander East is constructed, gas facilities located in Suffolk County and eastern Long Island will have access to Canadian gas from Iroquois and the Sable Island area and other domestic supply sources accessible to Algonquin's mainline system from Islander East. If Iroquois constructs its ELI Pipeline Project, those facilities may indeed provide an additional access to Sable Island gas, if Iroquois constructs an interconnection with Algonquin's system. However, the potential for duplication in supply

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[71] Islander East, 100 FERC at para. 74.

[72] Connecticut AG rehearing request, at 15.

sources does not warrant a finding that a pipeline facility is not in the public convenience and necessity.

81. While the Connecticut AG has repeatedly argued that this supply is much needed by its citizens, there is no evidence in this proceeding that Connecticut customers have expressed any interest in expanding their current natural gas requirements by committing to firm contracts for new capacity. The Commission has determined that the proposed project will not impact Connecticut's existing service. Further, the proposed expansion of capacity on Algonquin's existing pipeline and Islander East's proposed project will increase existing capacity in Connecticut. As stated in the September 19 order, the Islander East and Algonquin projects will be able to increase the capacity that is available on those pipelines in Connecticut that could potentially serve Connecticut customers when and if potential shippers in Connecticut decide that they need to contract for more capacity. Also, interruptible service could be established at the currently proposed capacity level through the addition of taps in Connecticut.[73] The fact that Connecticut has chosen not to benefit at this time does not mean that the proposed project will not benefit Connecticut in the future. The Connecticut AG's request for rehearing on this issue is denied.

7. *Reliability*

a. *Connecticut AG Arguments*

82. The Connecticut AG argues that the basic premise of the order is that Islander East is needed because two pipelines are better than one. It argues that if the Commission assumes more is better with

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[73] Islander East, 100 FERC at para. 74.

regard to pipelines, and that the Commission's decision has nothing to do with the route by which any given pipeline crosses the sound. It claims that if a new pipeline is needed simply in order to have more pipelines, the new line could be placed in any area and should be placed in one with lesser environmental consequences.

83. The Connecticut AG claims that there was not a single piece of evidence that the existing Iroquois pipeline has ever failed. It argues that if reliability is such an important benefit, the EIS or the order should include an analysis demonstrating the alleged increase to reliability of the regional pipeline infrastructure that Islander East is suppose to provide. It argues that it is arbitrary and capricious for an administrative agency to approve a project with admittedly serious adverse environmental consequences, ostensibly on the basis of increased reliability. It argues that even if one were to accept without proof that more pipelines are good and increase system reliability, this conclusion would not in any way provide support for this particular project.

84. The Connecticut AG argues that there are numerous other projects, such as the Blue Atlantic Pipeline and others, that can provide apparently needed increased reliability. It also contends that even Islander East could provide this increase in reliability without the pronounced environmental consequences of the proposed project, by simply moving its Connecticut landfall a few miles in either direction.

85. In response, Islander East asserts that the Commission specifically considered and rejected the Connecticut AG's arguments. It states that the Commission's finding of reliability was fully supported by

the decisions of shippers who have specifically and deliberately chosen the Islander East Project over other available alternatives, particularly, Iroquois' ELI Project. It contends that KeySpan Delivery Companies[74] have explained that they chose to enter into precedent agreements with Islander East "to ensure that [they] would procure new firm capacity in a timely fashion in a manner that would enhance the reliability of [their] distribution systems and because the Iroquois ELI Project does not offer the same reliability benefits to KeySpan as Islander East."[75] It also cites to Brookhaven Energy Limited Partnership's (Brookhaven) comments on the draft EIS, which states that Islander East's proposal is in the public interest because of the increased reliability of both electric and gas service on Long Island that cannot be duplicated by the ELI System Alternative.

86. In response, Brookhaven states that the New York State Board on Electric Generation Siting and the Environment issued it a certificate of environmental compatibility and public need for the Brookhaven Energy facility. Brookhaven states that alternative projects that would involve the expansion of the existing pipeline serving eastern Long Island could jeopardize the viability of the Brookhaven project by subjecting it to the prospect that its output may be involuntarily curtailed by the Long Island Power Authority (LIPA) in periods of high load. It states that in the event of a disruption of the only

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[74] KeySpan Delivery Companies include KeySpan Gas East Corporation, d/b/a KeySpan Energy Delivery Long Island and The Brooklyn Union Gas Company, d/b/a KeySpan Energy Delivery New York.

[75] Islander East answer, at 11, *citing* KeySpan Delivery Companies' April 23, 2002 answer.

current source of gas supply to the substantial amount of gas fired generation located in eastern Long Island, LIPA's ability to meet electric load on Long Island might otherwise be jeopardized.

87. Brookhaven asserts that any short term environmental benefits produced by expanding existing pipeline facilities on the Long Island Sound, rather than constructing a separate new pipeline as Islander East proposed, may be more that offset by the loss of the environmental and other benefits of the Brookhaven Energy Project. It urges the Commission to recognize that any temporary environmental benefits stemming from the expansion of existing pipeline facilities under the Long Island Sound must be weighed against the substantial and continuing adverse environmental and public interest impacts that would result if Brookhaven Energy were unable to proceed with its project.

Commission Response

88. A power plant currently being served solely by a single source of gas cannot serve its customers if something happens to disrupt that source of gas. As such, those customers will be without electricity until the pipeline is repaired and service is restored. Similarly, if an unexpected event that disrupts service to a natural gas local distribution company that relies solely on one source of gas to serve its gas customers, those customers will be without gas until the pipeline is repaired. If the event occurred during the winter, those customers could be without heat for an extended period of time. Therefore, when a second and alternative source is added to a particular area, there is an increase in the reliability of natural gas service to that area.

89. As pointed out in the September 19 order, disruption of existing firm service from Iroquois for any significant period could require KeySpan Delivery Companies to curtail service to up to approximately 124,000 natural gas customers on Eastern Long Island. This number does not include the disruptions to the many electric customers that presently rely on KeySpan electric generation facilities or the potential customers of Brookhaven's future gas-generation facility.

90. The Commission, as well as others, including the New York PSC and New York Reliability Council, believe it is important to plan for the single failure of any gas pipeline. Accordingly, the Commission is reasonably assured that it is in the public interest to approve a pipeline facility that will continue to provide service to high priority customers in the event service from other alternative pipelines experience long term disruptions. The fact that such a disruption has not occurred in the past does not mean that the Commission has to prove that it is likely to occur in the future to justify approving a second pipeline. The Connecticut AG's request for rehearing on this issue is denied.

b. *Branford Land Trust Comments*

91. In the September 19 order, the Commission addressed Branford Land Trust's argument that the Islander East pipeline is not needed to increase reliability of the pipeline infrastructure in eastern Long Island because Iroquois' existing system interconnects with the three pipeline companies in Connecticut that could serve Long Island.[76] It argued

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[76] Specifically, it refers to Iroquois, Algonquin, and Tennessee Gas Pipeline Co.

that damage to any of these three pipelines could be circumvented by routing the gas through the other two companies' lines.

92. In response, the Commission explained that it would be difficult to determine what, if any, impact a disruption on Iroquois' system upstream of its Connecticut facilities will have on supplies intended to be delivered to Long Island. Rerouting capacity from other pipelines would be dependent upon available capacity on interconnecting pipelines and the feasibility of being able to get that capacity for use on Iroquois' system.

93. The Branford Land Trust states that the Commission inappropriately dismisses its argument that the interconnected nature of the pipeline system in southwestern Connecticut provides sufficient reliability. It argues that "replacing lost capacity on the hypothetically damaged Iroquois pipeline by delivery via the Islander [East] pipeline will also require rerouting the capacity on the same pipeline systems."

Commission Response

94. The Branford Land Trust's argument is based on the mistaken premise that if service on one pipeline is disrupted the gas from the damaged pipeline will need to be rerouted to the second pipeline to provide the necessary reliability. The availability of a second source of gas provides reliability because there will be two independent sources of gas. If something happens to one pipeline and it is unable to deliver its capacity to the LDC or power plant, the second pipeline can still deliver its volumes. If the second pipeline is operating at capacity, it will not be able to take on the additional capacity from the damaged pipeline but it will be able to continue to deliver

its volumes. Accordingly, Long Island consumers will continue to receive natural gas supplies.

8. *In-Service Date*

95. The Connecticut AG objects to the assertion that the Islander East pipeline is required because it is the only project that will be ready in time for the 2003-04 heating season. It states that this fact is not a reasonable factor upon which the Commission could base its decision. It states that the commencement dates in the precedent agreements are vague and approximations of possible future needs. It contends that absent hard proof that a given commencement date is of material significance, it is arbitrary and capricious to define the project need based upon precedent agreements commencement dates, particularly when the company that owns Islander East is also one of the purchasers of the natural gas under the precedent agreements and thus is on both sides of the transactions. Additionally, it argues that because of the Connecticut moratorium Islander East will not be getting any permit decisions from state agencies until at the earliest June 2003. Therefore, the in-service dates advanced by Islander East will not be met. Therefore, the Connecticut AG argues that it is erroneous for the Commission to conclude in paragraph 61 that the meeting in-service dates of 2003-04 is a "chief consideration" underlying the Commission's decision.

Commission Response

96. In its request for a comparative hearing, Iroquois argued that there were similarities that overlap between its ELI Pipeline Project and Islander East's proposed facilities, particularly with respect to environmental matters, and that consolidation of common

issues would foster administrative efficiency, avoid duplication of effort, and generally serve the public interest. In response, the Commission pointed out a comparative hearing is inherently a time consuming resolution process. It also stated that timely development of the necessary pipeline infrastructure and the parties stated need for the facilities for the 2003/2004 heating season were its chief considerations in determining that the Commission's approach not to grant a comparative hearing best serves those purposes, as well as administrative efficiency. As such, the in-service date was not the chief consideration in granting the certificate authorization. It was one of two chief considerations in determining that a comparative hearing would not foster administrative efficiency.

97. Whether Islander East will be able to construct its facility in time to meet its in-service date is not a determinative factor. Whenever possible, the Commission tries to process an application for a proposed pipeline within the time frame requested by the applicant. The processing of a certificate application is extensive and requires in-depth analysis of extensive data, studies, and other detailed information. Much of that information is provided by the pipeline and other parties while the Commission is processing the application. When the Commission has determined that there is sufficient information in the record to determine that the project is in the public convenience and necessity, the Commission will issue an order on the merits. Even after the Commission issues an order on the merits, however, as the case is here, the pipeline cannot commence construction until the pipeline receives final clearance from the Director of the Office of Energy Projects (OEP).

98. Oftentimes, a pipeline does not meet its proposed in-service date because the preconstruction requirements take longer than expected. However, that fact does not mean that the project is no longer required by the public convenience and necessity. As discussed in the previous orders and above, the Commission considers numerous factors to determine if a pipeline construction project should be approved. Those factors do not cease to exist if the pipeline fails to meet its proposed in-service date. The Commission believes it is essential that it act in a timely manner to allow Islander East the time necessary to comply with the required pre-construction conditions. As stated in the September 19 order, it is not in the public interest for the Commission to make that possibility a certainty by failing to move forward in this proceeding in a timely manner. The Connecticut AG's request for rehearing on this issue is denied.

9. *Public Interest*

99. As stated in the September 19 order, the Commission determined that it was in the public interest to issue the requested certificate authorization at that time. The Connecticut AG interpreted this statement to mean that the Commission believed that "it is in the public interest to ignore the moratorium enacted by the Connecticut legislature".[77] It asserts that the citizens of Connecticut, through their legislator, have the right and authority to determine what is in their interest and have done this by enacting a moratorium that does not ban or prohibit the project but seeks to accomplish what NEPA required the Commission to do, conduct a full need and environmental impact study before examining which, if

[77] Connecticut AG's rehearing request, at 17.

any, projects can satisfy the legitimate needs of Long Island with the least environmental damage.

Commission Response

100. As stated in the September 19 order, in enacting the NGA, Congress placed ultimate authority for determining the location of interstate pipelines with the Commission, "a federal body that can make choices in the interest of energy consumers nationally."[78] As stated, the Commission has complied with NEPA and has completed the environmental impact study and determined that the Islander East Project is an appropriate project to satisfy the needs of Long Island consumers.

10. *One Pipeline Alternative*

101. The Connecticut AG also objects to the statement in the order that it contends indicates an objection to a one-pipe alternative because the relevant private companies have not evinced a willingness to work together. Without any cites to any legal authority or any legal argument, it states that if the Commission tells the companies that they can work together, they will find a way to do so.

Commission Response

102. In the September 19 order, the Commission discussed the possibility of a one pipeline alternative for the portion of the Iroquois' ELI and Islander East's projects that use the same route in the Central Pine Barrens on Long Island. The Commission did not state, nor does it support, a one pipeline alternative for the portion of the projects that cross Long Is-

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[78] *See* National Fuel Gas Supply Corp. v. Public Service Comm. of NY, 894 F.2d 571 at 579 (2nd Cir. 1990).

land Sound. Even assuming, for argument sake, that only one pipeline would be built for the combined capacity of Iroquois' ELI and the Islander East Projects, that pipeline would have to be a facility similar to the proposed Islander East Project. An alternative similar to the ELI System Alternative that would use the existing Iroquois' facility cannot accomplished the policy goals satisfied by a second pipeline similar to the proposed Islander East Project.

11. *Federal, State, and Local Permits*

103. The September 19 order stated that any state or local permits issued with respect to the jurisdictional facilities authorized must be consistent with the conditions of the certificate. It explained that the Commission encourages cooperation between interstate pipelines and local authorities. However, the Commission pointed out that state and local agencies, through application of state or local laws, may not prohibit or unreasonably delay the construction or operation of facilities approved by the Commission.[79] Additionally, in the September 19 order, Environmental Condition No. 42 required that Islander East file documentation concerning its CZMA certificates of consistency from Connecticut and New York before it commenced construction of the facilities.

104. In response, the Connecticut AG states that the Commission does not have the authority to direct the results of state regulatory permit programs in

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[79] *See, e.g.*, Schneidewind v. ANR Pipeline Co., 485 U.S. 293 (1988); National Fuel Gas Supply v. Public Service Commission, 894 F.2d 571 (2d Cir. 1989); and Iroquois Gas Transmission System, L.P., *et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

contravention of state and federal law. It argues that to the extent the order is interpreted as requiring the Connecticut authority to approve permits under the CWA or under the CZMA, the order is invalid. It argues that these permits have the same force and validity under federal law and cannot be preempted by the Commission. Citing *PUD No. 1 v. Washington Dept. Of Ecology (PUD)*,[80] the Connecticut AG states that:

> [t]he United States Supreme Court has already addressed this issue in a case involving the interplay between the CWA and the NGA and concluded: "[Section] 401 of the Act requires States to provide a water quality certification *before* a federal license or permit can be issued . . ."[81]

105. The Connecticut DEP Commissioner claims that the order violates the United States Constitution by usurping power that belongs to the States. It contends the Commission ignored the CZMA application procedure where Islander East needs to provide the Commission with certification that the project complies with the state's approved CZMA program. It states that Connecticut objects to Islander East's certificate and that the proposed activities are inconsistent with Connecticut's federally approved Coastal Zone Management Plan. On October 15, 2002, the Connecticut DEP issued its denial of Islander East's request for a CZMA consistency determination.

106. The Connecticut DEP Commissioner claims that this leaves the Commission in the awkward po-

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[80] 511 U.S. 700 (1994).

[81] *See* Connecticut AG's rehearing request, at 18.

sition of having issued the certificate prematurely and that it now must be revised to reflect the implications of the Connecticut DEP's objections to CZMA certification. Similarly, the Connecticut DEP Commissioner argues that the Commission can not issue a certificate for Islander East's project unless and until a water quality certification has been provided under the CWA. The Connecticut DEP Commissioner also cites to *PUD*, to support its contention that State certification is required before a federal license or permit can be issued. It argues that the CZMA and CWA are federal requirements and cannot be preempted by the Commission. Therefore, it concludes that the order is invalid.

107. The Central Pine Barrens Joint Planning and Policy Commission argues that the Commission's action is a gross violation of state law. It states that it represents an unacceptable amount of clearing. It contends that New York's Environmental Conservation Law prohibits development in the Core Preservation Area unless a hardship permit is issued. Therefore, it argues that the amount of clearing proposed by Islander East is illegal under State law.

Commission Response

108. Generally, the Connecticut parties raise two issues here. One concerns the Commission's authority concerning state permits issued under the CZMA and the CWA. The other concerns federal preemption over state and local permits.

109. Concerning state and local permits, for over ten years, citing the Supreme Court's ruling in *Schneidewind v. ANR Pipeline Co. (Schneidewind)*,[82]

[82] 485 U.S. 293 (1988).

the Commission has included language in virtually every order in which a construction certificate is issued, including the September 19 order issued here, explaining its policy requiring applicants to cooperate with state and local agencies, but noting that such agencies may not, "through the application of state and local laws, . . . prohibit or unreasonably delay the construction of facilities approved by the Commission."

110. In *Schneidewind*, the Court ruled that Michigan's regulations aimed at regulating activities of a natural gas company was preempted by the NGA. In *National Fuel Gas Supply Corporation v. Public Service Commission of the State of New York (National Fuel)*,[83] the court specifically addressed the issue of a state's ability to impose additional requirements on a pipeline construction project authorized by the Commission. Specifically, in *National Fuel*, the court reviewed the theories under which federal preemption of State law may be found, and held that a New York statute requiring an interstate pipeline to apply for and obtain a certificate of environmental compatibility from the New York PSC was preempted by the NGA on the grounds that either the NGA explicitly vested exclusive jurisdiction in the Commission to regulate interstate pipeline facilities or Congress had so occupied the field of regulation of interstate pipelines by enactment of the NGA that there was no room for the states to regulate.[84] Accordingly,

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[83] 894 F.2d 571 (2nd Cir. 1990).

[84] The court noted that Congress established the Commission as "a federal body that can make choices in the interests of energy consumers nationally," and reasoned that because the Commission "has authority to consider environmental issues, states may not engage in concurrent site-specific environmental

the court held that the pipeline did not have to comply with New York's regulatory scheme.

111. Shortly after *National Fuel* was decided, the Commission, citing that case, found that a New York State Constitutional provision which would prohibit the taking of land for a pipeline route through State Reforestation Lands was preempted by the NGA, which vests sole authority to determine an interstate pipeline route in the Commission.[85] Subsequently, the Commission explained its policy of encouraging applicants to cooperate with State and local authorities, stating:

> Although the Natural Gas Act and the regulations promulgated by the Commission pursuant to that statute generally preempt state and local law, the Commission has encouraged applicants to cooperate with state and local agencies with regard to the siting of pipeline facilities, environmental mitigation measures, and construction procedures. This is especially true with regard to the Commission's Stream and Wetland Construction and Mitigation Procedures which require pipelines to apply for state-issued stream crossing permits. However, the Commission's practice of encouraging cooperation between interstate pipelines and local authorities does not mean that those agencies

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review. Allowing all the sites and all the specifics to be regulated by agencies with only local constituencies would delay or prevent construction that has won approval after federal consideration of environmental factors and interstate need, with the increased costs or lack of gas to be borne by utility consumers in other states." *National Fuel*, 894 F.2d at 579.

[85] Iroquois Gas Transmission System, L.P., 52 FERC ¶61,403-404.

> may undermine through their regulatory requirements, the force and effect of a certificate issued by the Commission.[86]

112. With regard to a local authority's denial of a permit to a pipeline to conduct regulated activities within the town because the local agency thought another route was superior to the Commission-approved route, the Commission stated that the NGA "preempts state and local law to the extent the enforcement of such laws or regulations would conflict with the Commission's exercise of its jurisdiction under the federal statute."[87] The Commission further explained:

> [a] state or local agency may challenge a Commission decision by filing a timely request for rehearing and appealing a Commission decision to the courts. A state or local agency may not use its regulatory power to challenge a decision by this Commission.[88]

In sum, as held by the court in *National Fuel*, the NGA preempts state and local agencies from regulating the construction and operation of interstate pipeline facilities.[89]

113. That a state or local authority requires something more or different than the Commission, how-

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[86] Iroquois Gas Transmission System, L.P., 59 FERC ¶ 61,094, at 61,346-47 (1992).

[87] Id. at p. 61,360. *See also* Maritimes & Northeast Pipeline, L.L.C. (Maritimes), 81 FERC ¶ 61,166, at 61,728-31 (1997)

[88] Id.

[89] 894 F.2d at 575-56 (setting forth circumstances under which the Supremacy Clause of the Constitution, Article VI, clause 2, provides for preemption of State and local law).

ever, does not make it unreasonable for an applicant to comply with both the Commission's and another agency's requirements. It is true that additional state and local procedures or requirements could impose more costs on an applicant or cause some delays in constructing a pipeline. However, not all additional costs or delays are unreasonable in light of the Commission's goal to include state and local authorities to the extent possible in the planning and construction activities of pipeline applicants. A rule of reason must govern both the state's and local authorities' exercise of their power and an applicant's bona fide attempts to comply with state and local requirements.[90]

114. If a conflict arises, however, between the requirements of a state or local agency and the Commission's certificate conditions, the principles of preemption will apply and the federal authorization will preempt the state or local requirements. The Commission cannot act as a referee, on an ongoing basis, between applicants and state and local authorities regarding each and every procedure or condition imposed by such agencies. In the event compliance with a state or local condition conflicts with a Commission certificate, parties may bring the matter before a Federal court for resolution.[91]

115. While state and local permits are preempted under the NGA, state authorizations required under federal law are not. The Commission routinely issues certificates for natural gas pipeline projects subject to the federal permitting requirements of the CZMA

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[90] Maritimes, 81 FERC at 61,730-31.

[91] *Id.*

and CWA.[92] This approach is founded on practical grounds. In spite of the best efforts of those involved, it is often impossible for an applicant to obtain all approvals necessary to construct and operate a project in advance of the Commission's issuance of its certificate. This happens for many reasons. For instance, section 307 of the CZMA,[93] provides that "[a]t the earliest practicable time, the state or its designated agency shall notify the Federal agency concerned that the state concurs with or objects to the applicant's consistency certification." This section further provides that "[i]f the state or its designated agency fails to furnish the requested notification within six months after receipt of its copy of the applicant's certification, the state's concurrence with the certification shall be conclusively presumed." In some cases, these deadlines are not met for whatever reason.

116. The regulations implementing the CZMA take this, and other, eventualities into account by providing that "[f]ederal agencies should not delay processing applications pending receipt of a State agency's concurrence."[94] That is exactly what the Commission has done here in processing Islander East's application and issuing a certificate, the exercise of the authority thereunder of which is conditioned upon, among other things, issuance of a determination of consistency with Connecticut's and New York's coastal management plan.

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[92] *See, e.g.*, Gulfstream Natural Gas System, L.L.C., 94 FERC ¶ 61,185 (2001); Florida Gas Transmission System, 90 FERC ¶ 61,212 (2000).

[93] 16 U.S.C. § 1456(c)(3)(A).

[94] 15 C.F.R. § 930.63(c) (2001).

117. The validity of this approach was approved under a similar statute in *City of Grapevine, Texas v. DOT.*[95] In that case, the Federal Aviation Administration (FAA) approved a proposed runway before completion of the review process required by the National Historic Preservation Act (NHPA). To ensure compliance with the NHPA, the FAA conditioned its approval of the runway upon completion of the NHPA review. The court rejected a challenge to the validity of this approach, concluding that "because the FAA's approval of the West Runway was expressly conditioned upon completion of the section 106 process, we find here no violation of the NHPA."[96] Here, Islander East's authorization to construct its proposed facilities is conditioned on its receiving its CZMA certification from New York and Connecticut.

118. As stated, the Connecticut AG and the Connecticut DEP Commissioner cite to the Supreme Courts ruling in *PUD* to support their argument that the Commission can not issue a certificate to Islander East until Connecticut issues a decision under the CZMA and a permit under the CWA. Their reliance on *PUD* is misplaced. In *PUD*, the Supreme Court addressed the issue of whether a state could condition a CWA permit on the maintenance of specific minimum stream flows to protect salmon and steelhead runs. In the background section of the opinion, the Court discusses requirements of CWA section 401. While it states that the CWA "requires States to provide a water quality certification before a federal license or permit can be issued," it goes on to explain that "[s]pecifically, [section] 401 requires an appli-

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[95] 17 F.3d 1502 (D.C. Cir. 1994).

[96] *Id.* at 1509.

cant for a federal license or permit to conduct any activity 'which may result in any discharge into the navigable waters' to obtain from the State a certification "that any such discharge will comply with . . ." the CWA.[97] Islander East is required to fulfill all Federal permitting and certification requirements before it can commence construction, including CZMA and CWA requirements. Accordingly, while the Commission has issued its certificate, Islander East cannot commence construction of the approved facilities until it complies with all required Federal permits. This is consistent with the court's ruling in *PUD*.

119. We note that on November 14, 2002, Islander East filed a notice of appeal of Connecticut DEP's decision with the Secretary of Commerce. Only time will tell whether the Secretary of Commerce will affirm or overturn Connecticut DEP's objections to Islander East's consistency determination or whether Islander East will be required to revise its project in order to obtain a consistency determination from the Connecticut DEP. Nevertheless, until Islander East obtains the necessary approvals under the CZMA and the CWA, it cannot exercise the authorization granted in the September 19 order to construct and operate its project. Meanwhile, Islander East can concurrently work towards complying with the other pre-construction conditions imposed in the September 19 order.

12. *Constitutional Arguments*

a. *Eleventh Amendment*

120. Generally citing *Seminole Tribe of Fla. v. Florida (Seminole Tribe)*[98] without any legal analysis, the

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[97] PUD, 511 U.S. at 707.

[98] 517 U.S. 44 (1996).

Connecticut AG argues that "a state's sovereign immunity can be overridden only under a valid constitutional power."[99] It contends that the land underlying the Long Island Sound is owned by the respective states, New York and Connecticut, not the federal government. It states that from the high tide mark on the Connecticut side of the Sound to the border with New York, the submerged lands under the Sound belong to, and are held in trust by, Connecticut for the sake of its citizens. It contends that no activity can occur on these public lands, without Connecticut's permission. Specifically, it states that Islander East will need a Structures and Dredging permit under Connecticut law and that no such permit has been issued. It argues to the extent the order states that all state permits must be consistent with the Commission's authorization and cannot prohibit or delay the project, it is illegal and unconstitutional.

121. In response, Islander East states that the Connecticut AG's argument that its consent is required before any activity can occur on the state trust lands is misguided. It states that the NGA occupies the field of natural gas regulation to the exclusion of state law, and therefore preempts state law that attempts to regulate within that field.[100] Islander East contends that federal courts have also held that state laws that could disable or render the eminent domain provisions of the NGA or Federal Power Act unenforceable are preempted.[101] Finally, it argues that a

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[99] *See* Connecticut AG's request for rehearing, at 19.

[100] *Citing* Schneidewind v. ANR Pipeline Co., 485 U.S. at 300 (1988).

[101] *Citing* Tennessee Gas Pipeline Co. v. Mass. Bay Transportation Authority, 2 F.Supp. 2d 106, 111 (D. Mass 1998); Pub.

state may not use its own laws to frustrate the effectiveness of federal statutes.[102]

Commission Response

122. As discussed above, the Supreme Court's ruling in *Schneidewind* and the District Court ruling in *National Fuel* demonstrate that the NGA preempts state and local agencies from regulating the construction and operation of interstate pipeline facilities. In *Seminole Tribe*, Congress passed the Indian Gaming Regulatory Act (Gaming Act) under the Indian Commerce Clause. The Gaming Act allowed Indian tribes to conduct certain gaming activities only in conformance with a valid compact between the tribe and the State in which the gaming activities are located. Under the Gaming Act, states have a duty to negotiate in good faith with a tribe toward the formation of a compact, and the tribe may sue a state in federal court in order to compel performance of that duty. The Supreme Court held that the Gaming Act violated the state's sovereign immunity and that the Eleventh Amendment prevents Congress from authorizing suits by Indian tribes against the State to enforce legislation enacted under the Indian Commerce Act.

123. In *Seminole Tribe*, the Court states that:

> The Eleventh Amendment provides: "The Judicial power of the United States shall not be con-

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Util. Dist. No. 1 of Pend Oreille County v. FPC., 308 F.2d 318, 323 (D.C. Cir. 1962), *cert. denied*, 372 U.S. 908 (1963).

[102] *Citing Stockton v. Baltimore & N.Y.R.Co.*, 32 F.9, 17-18 (CCNJ 1887)(finding that "[t]he constitution, and all laws made in pursuance thereof are the supreme law of the land; for, if the consent of a state is necessary, such state may always, in pursuit of its own interests refuse its consent, and thus thwart the plain objects and purposes of constitution").

> strued to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or Subjects of any Foreign State."[103]

The NGA does not address "any suit in law or equity" against a state. Therefore, the application of the Eleventh Amendment and the Court's ruling in *Seminole Tribe* has no significance here. NGA preemption over state law and permits evolves from the Supremacy Clause. As the Court stated in *Schneidewind*:

> [t]he circumstances in which federal law preempts state regulation are familiar. . . . The NGA has long been recognized as a "comprehensive scheme of federal regulation of all wholesales of natural gas in interstate commerce." The NGA confers upon the FERC exclusive jurisdiction over the transportation and sale of natural gas in interstate commerce. FERC exercises authority over the rates and facilities of natural gas companies used in this transportation and sale through a variety of powers.[104]

b. *Tenth Amendment*

124. The Connecticut AG and the Connecticut DEP Commissioner also argue that public trust land is owned by the people through their respective state governments and cannot be subject to seizure by a for-profit private company for its own purposes.[105]

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[103] 517 U.S. at 54.

[104] 300-301 cites omitted.

[105] Similarly, the Branford Land Trust questions whether promoting market efficiency can provide sufficient justification for giving private, non-profit corporations the power to seize the property of private individuals and organizations.

They claim that no federal court has held that a Commission certificate authorizes a utility company to override the Tenth Amendment to the Constitution and seize state land. Therefore, it argues that the order overreaches the power of the Commission, intrudes on the sovereignty of the state, and violates the Tenth Amendment to the United States Constitution. The Connecticut DEP Commissioner makes a similar argument.

125. In response, Islander East contends that the power of eminent domain is vested in the federal government as an element of sovereignty, and may be exercised in the enjoyment of the powers conferred upon the federal government by the Constitution.[106] It states that there is no question that the United States may take property owned by a State. It asserts that the federal government, as well as federal agencies to whom the power of eminent domain has been delegated, can condemn property owned by a state over the State's objection.[107]

126. Islander East also points out that as explained by the United States Supreme Court:

> [i]f the right to acquire property . . . may be made a barren right by the unwillingness of property-holders to sell, or by the action of a State prohibiting a sale to the Federal Government, the con-

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[106] *Citing* Kohl v. United States (Kohl), 91 U.S. 367, 372 (1876).

[107] *Citing Id.* at 373, United States v. South Dakota, 212 F.2d 14 (8th Cir. 1954)(approving the taking of state land for airforce base); United States v. New York, 160 F.2d 479 (2nd Cir. 1947)(permitting a temporary easement across state parkland for railroad purposes); Minnesota v. United States, 125 F.2d 636 (8th Cir. 1942)(allowing the taking of state land for Indian reservation).

> stitutional grants of power may be rendered nugatory, and the government is dependent for its practical existence upon the will of a State. . . This cannot be.[108]

127. Islander East states that the Tenth Amendment provides that, "powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people."[109] Islander East asserts that by its terms, the Tenth Amendment is facially inapplicable, because the power at issue here is expressly granted to the federal government. It contends that there can be no doubt that the Constitution delegates to Congress power over interstate commerce.[110]

128. Islander East also asserts that it is equally well-established that the transportation of natural gas from state to state is interstate commerce and in the public interest.[111] It states that Congress exercised its power over the transportation of natural gas by enacting the NGA and that pursuant to its express power to regulate interstate commerce, Congress may delegate the federal power of eminent domain to a

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[108] Islander East's answer at 18, *quoting* Kohl, 91 U.S at 371.

[109] *Citing* U.S. Const. amend. X.

[110] *Citing* U.S. Const. Art. I, § 8, cl. 3 (providing that "[t]he Congress shall have Power to . . . regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.").

[111] *Citing* Thatcher v. Tennessee Gas Transmission Co. (Thatcher), 180 F.2d 644, 646 (5th Cir. 1950)(stating that "[t]here can be no quarrel with the statement that the transportation or movement of natural gas . . . is interstate commerce"), *cert. denied*, 340 U.S. 829 (1950).

private corporation,[112] such as in NGA section 7(h). Islander East asserts that the delegation necessarily extends to public or state property unless Congress expressly restricts that power.

129. Islander East further states that if a natural gas pipeline company cannot condemn property owned by a state, then the state can substantially raise the cost of a project, unreasonably delay a project or perhaps prevent it altogether. It contends that in this proceeding, Connecticut asserts its own parochial interests in an effort to frustrate the will of Congress and the public interest by depriving consumers of additional supplies of natural gas. It states that through the NGA, Congress allowed for delegation to natural gas companies the power of eminent domain in order that the company could "comply with [Commission's] requirements as well as with all phases of the statutory scheme of regulation."[113]

130. Islander East states that a natural gas pipeline company that holds a FERC Certificate and commences an action under NGA section 7(h) to condemn property owned by a state is acting on behalf of the federal government to implement a decision that the pipeline project serves the national interest. Thus, "lands are subject to be taken by eminent domain" by a natural gas pipeline company acting pursuant to a Commission certificate.[114] Islander East

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[112] *Citing* Southern Pacific Transportation Co. v. Watt, 700 F.2d 550, 554 (9th Cir), *cert. denied*, 464 U.S. 960 (1983).

[113] *Citing* Thatcher, 180 F.2d at 647.

[114] *Citing* Tennessee Gas Transmission Co. v. Arkansas, 232 Ark. 156, 335 S.W.2d 312 (Ark. 1960)(finding a natural gas company liable for nominal damages to State on account of its pipeline crossing a navigable river).

also states that the Connecticut AG suggests that the State of Connecticut's sovereign immunity would be violated by the condemnation of the public trust lands. Islander East contends that case law makes clear that sovereign immunity is not a bar to the exercise of the federal power of eminent domain with respect to lands held in trust by a state.

Commission Response

131. In NGA section 7(c), the Congress gave the Commission jurisdiction to determine if the construction and operation of proposed pipeline facilities are in the public convenience and necessity. Once the Commission makes that determination, in NGA section 7(h), Congress gave the natural gas company authorization to acquire the necessary land or property to construct the approved facilities by the exercise of the right of eminent domain if it cannot acquire the easement by an agreement with the landowner. The Commission itself does not grant the pipeline the right to take the property by eminent domain. We find Islander East's response to the Connecticut AG's argument persuasive.

B. *Central Pine Barrens*

132. In the September 19 order, the Commission discussed Islander East's proposed Calverton Lateral Route and Calverton State Route 25 Alternative recommended in the final EIS. The Commission pointed out that the Calverton Lateral Route would go through a developing subdivision. Based on the information available at the time of the September 19 order, there were eleven residences within 50 feet of the Calverton Lateral Route. The developer of the Meadowcrest subdivision stated that 15 homes were completed and an additional 36 would be constructed

by the close of 2002. Additionally, there were eight planned residences that would be impacted by the proposed Calverton Lateral Route in the Spring Meadow subdivision.

133. In light of the development, the Commission determined that the Calverton State Route 25 Alternative was the preferred route. The alternative would minimize the length of the lateral, maximize the use of existing rights-of-way, and minimize impacts to new residential areas.[115] The Commission explained that it prefers pipeline routing along existing road or utility rights-of-way, whenever possible, over creating a new greenfield pipeline right-of-way, especially through residential areas.

134. In response to concerns that the alternative would impact wetlands and endangered and special concern species, the Commission stated that the Calverton State Route 25 Alternative does not cross any identified National Wetland Inventory mapped wetlands, and the area of species habitat along the alternative would be avoided by the use of an HDD crossing of Horn Pond and the surrounding area. The Commission explained that by routing the lateral along State Route 25, the permanent right-of-way would abut the road right-of-way and avoid further fragmentation of the Core Preservation Area (CPA). Further, the alternative would avoid the unfragmented areas identified by the Pine Barrens Society as being located north and south of State Route 25, since activities would be limited to a 60-foot-wide corridor adjacent to the road.

135. Numerous individuals filed letters requesting that the Commission reconsider its decision to route

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[115] Final EIS at 4-26 - 4-29.

the pipeline along the Calverton State Route 25 Alternative expressing concerns about the amount of clearing of trees that will be required. Numerous letters echo previous concerns regarding the alternative's impact on wetlands and endangered species. Ginny Fields, a Suffolk County Legislator, states that the Pine Barrens is located above the sole aquifer and source of drinking water for portions of Suffolk County. She states that it is imperative not to impact a sole source of drinking water to avoid impacting the construction of twelve homes.

136. As discussed in the September 19 order, the Calverton State Route 25 Alternative is the Commission's preferred route because it will limit the impact on numerous existing and proposed residences. Further, the route will run parallel to an existing road and will not fragment the CPA. It will not impact any wetlands or endangered species. Additionally, the final EIS discusses the Suffolk County aquifer and determines that the adherence to the procedures discussed in the final EIS would provide adequate protection for the aquifer. We also note that Environmental Condition No. 13 requires that Islander East, among other things, notify the Suffolk County Department of Health Services of activities that will occur in the aquifer protection area.

137. The Central Pine Barrens Joint Planning and Policy Commission states that the Commission's action is a gross violation of state law. It states that it represents an unacceptable amount of clearing. It contends that New York's Environmental Conservation Law prohibits development in the core area unless a hardship permit is issued. Therefore, it argues that the amount of clearing proposed by Islander East is illegal under State law. Finally, it re-

quests that the Commission require that Islander East purchase land to be placed in government ownership to replace the cleared land.

138. The Sustainable Energy Alliance of Long Island contend that the objection of one developer cannot be allowed to undermine what is ultimately in the public interest. It asserts that the Commission should ensure that all measures will be taken to comply with the strict guidelines imposed in the Pine Barrens Act.

139. As discussed above, if a conflict arises between the requirements of a state or local agency and the Commission's certificate conditions, the principles of preemption will apply and the federal authorization will preempt the state or local requirements. In the event compliance with a state or local condition conflicts with a Commission certificate, parties may bring the matter before a Federal court for resolution.[116] While state law is preempted by the NGA, Environmental Condition No. 39 requires that Islander East consult with the Central Pine Barrens Commission concerning the construction through this area. Finally, any issues concerning compensations should be discussed and addressed at easement negotiations or during the eminent domain proceedings.

140. The New York State Office of Parks, Recreation and Historic Preservation filed a letter expressing concern about the impact the proposed route would have on Brookhaven State Park along the William Floyd Parkway. It states that if the right-of-way is reduced to 60 feet wide and will be completely within parkway right-of-way, then construction in that area would be acceptable. It also states that the

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[116] See Maritimes, 81 FERC at 61,730-31.

Calverton Lateral alternative would be acceptable if it is contained in the State Route 25 right-of-way and if intrusion into park land is avoided to the greatest extent possible. With the above mentioned terms, construction in the area would be acceptable to the New York State Office of Parks, Recreation and Historic Preservation. As modified in the final EIS, and adopted in the September 19 order, the current route is in accord with these requirements.

C. *Other Environmental Issues*

141. Several parties and individuals raised comments concerning the final EIS. On September 30, 2002, the EPA filed a letter summarizing its review of the final EIS. The letter generally requests further information and comments on numerous aspects of the final EIS. On December 11, 2002, Islander East filed supplemental information, among other things, to update its consultations with various state and federal agencies. The December 11 filing also provides additional information and addresses concerns raised by the EPA in its September 30 letter.[117]

1. *Final EIS Executive Summary*

142. CT Stop the Pipeline (CT STP) questions various statements in the final EIS Executive Summary that it contends are inaccurate. For example, it states that the Executive Summary states that Connecticut will benefit. It disagrees and wants the statement removed from the EIS. It also argues that the acreage of potential offshore impact listed in the Executive Summary is inaccurate due to additional impacts from sedimentation, drilling mud releases, and an-

[117] *See* Islander East's December 11 filing, Section 1 at tab 10.

chor scars and should be revised to reflect those impacts.

143. As addressed in the September 19 order and above, the fact that Connecticut currently does not have contracts for service off the proposed pipeline does not mean that Connecticut will not benefit in the future when and if consumers in that state need to contract for service from the pipeline. The offshore acreage affected by the construction is an estimation based on modeling and using available data, and as such, is not an exact calculation. Further, we note that once the final EIS is issued the Commission does not modify the document. We do not believe the concerns raised by CT STP warrant any changes to the final EIS.

2. *Modeling / Offshore Impacts*

144. The September 19 order discussed the computer model Islander East conducted of potential spoil mound erosion. The Commission stated it agreed with the conclusion in the final EIS that the modeling effort adequately addressed the impact to the sediment mounds from a likely, foreseeable storm event and took that into consideration when it determined that Islander East's proposed project would be an environmentally acceptable action. However, the Commission determined that if a non-typical storm event were to occur during construction, there may be some unanticipated damage. As such, it required that Islander East run the offshore sedimentation model on the shallower sections of the spoil mounds. The purpose of the additional modeling was to provide the basis for subsequently determining damages in the unlikely event of a non-typical storm.

145. Several parties question the validity and extent of the offshore modeling. The Connecticut AG specifically refers to the Commission's requirement that Islander East conduct further modeling to adequately determine near shore areas that should be monitored for potential sedimentation impacts. It contends that the EIS cannot be considered complete when the model has not been run and the information reviewed. The Branford Land Trust also contends that there is a significantly high probability that the dredged sediments will be exposed to larger erosive and dispersive forces than were used by Islander East to analyze the dispersion of sediments on nearby productive shellfish habitat.

146. As stated, the Commission determined that the modeling reviewed in the final EIS was sufficient to analyze the reasonably foreseeable impact of the project as required by NEPA. The additional modeling was required solely to create a basis for determining subsequent damages that the pipeline may be responsible for in the event there is more damage than anticipated. As stated in the September 19 order, any damages caused by the construction of the project are the responsibility of the pipeline company, regardless of whether the impacts were anticipated through modeling or occurred due to unexpected conditions.

147. The EPA raises numerous issues and requests further information concerning Islander East's modelings to predict offshore impacts that it claims were not included in the final EIS. The final EIS does not restate or include all of the data in the public file, but rather is a tool to summarize and analyze potential impacts associated with the proposed project. Several documents in the record provide the details

requested by EPA for such offshore issues as computer modeling data for sediment dispersion, soil physical properties and the relationship to trench size, trench spoil transport and placement, modeling inputs related to storm events, sediment fate and transport along the plowed trench, and turbidity and resuspended sediments.[118] Further, Islander East provides additional information in response to the EPA's letter in its December 11 filing. We find that these documents sufficiently address the EPA's concerns.

3. *Limited Adverse Impacts*

148. CT STP points out that the final EIS states that anchor depressions could persist for years and that seabed depressions are long-term impacts. It argues that the final EIS failed to consider these significant long-term impacts when it determined that the Islander East project would have "limited adverse" environmental impact.

149. CT STP also argues that it is important that the Commission specify that the temporary construction right of way and extra work areas in forested areas will take at least 100 years to return to preconstruction conditions, especially if mature trees will not be replanted in these vicinities. It states that deforestation and degradation to area wetlands should be classified as long term, not limited or able to be mitigated.

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[118] The documents include: a report entitled, "On the Erosion and Transport of Sediments Displaced by the Construction of the Islander East Natural Gas Pipeline Across Long Island Sound: A Continuing Investigation," filed with Commission on July 18, 2002; a report entitled "Dredged Material Mound Dispersion Analysis Using LTFATE," filed with Commission on July 29, 2002.

150. Similarly, the EPA states that it cannot agree with the conclusion that the construction and operation of the pipeline would result in limited adverse environmental impacts. It cites to impacts to 3100 acres of open water, 125.5 acres of forested habitat, including forested wetlands, and 83.1 acres of open land.

151. In response, Islander East states that it engineered its pipeline to minimize impacts on environmentally sensitive resources such as wetlands and waterbodies, and has revised its construction plans to use techniques that will reduce disturbance to marine life and threatened and endangered species. It states that it also intends to use the mitigation measures described in its *Erosion Sedimentation and Control Plan*, such as adhering to fisheries' timing windows for waterbodies construction, minimizing construction rights-of-way widths in wetlands, installing temporary sediment barriers and permanent erosion control, minimizing duration of construction in wetlands and waterbodies, restoring the right-of-way to preconstruction contours, and revegetation of the right-of-way. It contends that these are proven pipeline construction methods that have been used in both onshore and offshore activities.

152. The final EIS specifically states that "[t]he establishment of new and expanded rights-of-way would result in long-term, unavoidable impacts." It also states that "loss of forests in the construction right-of-way would require 25 to 150+ years for full recovery from preconstruction levels" and that "offshore impacts to live bottom would generally be long tem."[119] The final EIS acknowledges these long-term

[119] Final EIS at 5-1.

impacts and took them into consideration when it determined that the overall project will have limited adverse environmental impacts.

4. *Restoration of Oyster Beds*

153. The Connecticut AG also contends that the Commission failed to demonstrate that damaged oyster habitat can be replaced. It states that without a nearshore sedimentation impact analysis, there is no data to determine what damage this project will cause and without a mitigation plan there is no means to review the proposed methods of dealing with the very damage it cannot yet evaluate. Similarly, in its October 15, 2002 CZMA determination letter, the Connecticut DEP concludes that the project would "irrevocably alter and permanently destroy" shellfish habitat, that "on-site mitigation to restore oyster beds is not possible," and that reseeding efforts would fail due to a lack of a firm, hard substrate for oyster spat to set and grow.

154. Information provided on the National Oceanic and Atmospheric Administration's (NOAA) Coastal Services Center website indicates that oyster attachment sites include almost any hard surface such as other living oysters, oyster shell, rocks, docks, pilings, and glass bottles, and that oyster larvae may preferably select oyster shell as a substrate. The website goes on to state that commercial oyster harvesters often "seed" areas with oyster shell (called "culch") to promote spat settlement.[120] This information indicates that appropriate site preparation of disturbed

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[120] http://csc.noaa.gov/acebasin/specgal/oyster.htm See also NOAA's Hudson Raritan Estuary Oyster Bed Restoration Project web page at http://www.nmfs.noaa.gov/habitat/restoration/community/projects/hudsonraritanestuaryoyster.htm

areas (e.g., replacement with oyster shell or other hard surface) could serve to mitigate impacts of oyster beds, averting the "permanent destruction" of shellfish habitat claimed by the Connecticut AG and DEP. Therefore, the Commission is reasonably assured that, if necessary, Islander East can replace the damaged oyster habitat.

5. *Wetland Issues*

155. Numerous parties and individuals raised issues concerning the project's impact on wetlands. In its comments, the EPA contends that the final EIS lacks detailed information necessary to understand the direct, indirect, and secondary impacts to wetlands and waters associated with the proposed project. It states that the analysis lacks detailed information on the specific locations, functions, and values of the wetlands and aquatic ecosystems impacted by the project. It asserts that the lack of detailed information on the quality of the wetlands and other aquatic ecosystems impacts makes it difficult to determine the relative impacts of various alternatives. The FWS requests that Islander East perform field delineations for wetlands that would be impacted by potential route variations prior to selecting a final route.

156. In response, Islander East states that where survey access was available, it completed wetland delineation in accordance with the COE's Wetlands Delineation Manual, and, in Connecticut, according to the Connecticut state delineation criteria. It asserts that NEPA regulations do not require that all of the detailed studies be included in the EIS, but they are typically analyzed and studied. Islander East also points out that while the pipeline construction will temporarily disturb wetlands, no wetlands will be

permanently filled and the project will not result in a net loss of wetlands.

157. As stated in the final EIS, wetlands affected by the project, as surveyed, were delineated using the U.S. Army Corp. of Engineers Wetlands Delineation Manual. Table 3.7.1-1 in the final EIS lists all the wetlands crossings affected by the construction and section 3.7 of the final EIS discusses the environmental consequences of the proposed project, construction and mitigation procedures, and site-specific wetland impacts. The analysis for alternatives takes into account various land use issues in addition to wetlands crossed. Surveys for all wetlands may not be completed, for route variations as well as for portions of the proposed pipeline, until landowner approval has been received by the pipeline company or until the pipeline can exercise its use of eminent domain to gain access to perform the required wetland surveys. In addition to the review of National Wetlands Inventory maps that has already been performed, Environmental Condition No. 5 requires that Islander East perform field delineations for route realignments for the entire certificated route, including recommended route variations.

6. *Use of Existing Row*

158. CT STP contends that collocation of pipeline adjacent to the Branford Steam Railroad constitutes a new utility corridor and goes against the statement that it reduces the need to establish new utility corridors. It argues that the right-of-way must go through wetlands, forest, and land trust property. It also claims that the expansions of existing right-of-way reduces the overall percentage of existing open space and cannot be mitigated. Therefore, it argues that because of these long term adverse impacts, the

percentage of pipeline that runs adjacent to the railroad be subtracted from the overall figure of 83 percent. Whether the land use is open, forested, or wetlands does not change the fact that the pipeline would be adjacent to an existing railroad (i.e., utility) corridor. Therefore, we do not agree that this area should be subtracted from the overall existing right-of-way calculation.

7. *Right-of-way Width*

159. The EPA recommends that the width of the rights-of-way along the route be reduced to the greatest extent possible to reduce adverse environmental impacts. In its December 11 filing, Islander East provides additional explanation of the standards it used to determine the widths of construction to reduce rights-of-way.

160. As stated in the final EIS, Islander East has minimized impacts by reducing the width of the permanent right-of-way in wetlands and collocating the proposed right-of-way with existing rights-of-way. Right-of-way widths need to be of sufficient size to install the 24-inch diameter pipeline and operate equipment safely. This width needs to accommodate spoil storage, the trench, pipe stringing, and equipment travel lanes. Some of these areas, such as the trench, have OSHA worker safety concerns. Also, topography must be considered, since pipeline rights-of-way constructed along the side of hills need greater widths to establish safe workspaces. A 75-foot-wide construction right-of-way for this large diameter pipe is usually the minimal width that is used in a relatively level terrain. We find that Islander East's right-of-way widths comply with Commission requirements.

8. *Additional Projects*

161. CT STP states that Islander East must be forthcoming about specifics of additional projects that would be needed for it to meet its contractual obligations. It asserts that Islander East should specify these projects and that the EIS reflect the additional environmental impacts. It states that without this information the final EIS is incomplete because full environmental impacts of the pipeline are not included.

162. Islander East's contracts with its existing shippers contemplate maximum daily transportation quantities may increase from 260,000 Dth per day in the first year of service to 445,000 Dth per day in 2008. It states that it recognizes that if the proposed facilities need to be expanded to meet its shippers' requirements. It states that it will file additional applications when necessary to install compression and/or pipeline looping when final capacity commitments are made. However, because specific future demand is unpredictable at this time any specific facilities for anticipated expansion are speculative.

9. *Railroad Right-of-way*

163. CT STP states that the final EIS does not address the need for the development of a site specific plan to identify areas of potential contamination. It states that the likelihood of soil contamination is highly probable. The Branford Land Trust states that excavation along the railroad right-of-way in or immediately adjacent to wetlands will disturb contaminated soils and degrade the water quality of the nearby wetlands. The Commission addressed this is-

sue in the September 19 order.[121] CT STP has not raised any new issues that would warrant the Commission revisiting this issue.

10. *Bedrock Testing / Groundwater Contamination*

164. CT STP is concerned about the accuracy of the bedrock from MP5.4 to 5.6. It states that Islander East should be required to hire a consultant from the Town of North Branford, the Connecticut DEP or the Regional Water Authority. The Connecticut AG also raises the need for a site-specific study to support its argument that the final EIS was incomplete. The Branford Land Trust also argues that construction between MP5.4 and 5.6 will exacerbate the contamination of groundwater resources.

165. North Branford reiterates its previous comments that the contaminated groundwater issue should have been studied before issuance of a permit and that the necessary environmental and scientific studies should be conducted by an impartial, third-party, rather than a sub-contractor of the applicant.

166. North Branford argues that evaluation on the localized, groundwater contamination in the direct path of the pipeline should have been a piece of fundamental scientific data, germane to the Commission's decision-making process. It states that the bedrock in the subject area is fractured and complex and that the Rizzo Association advised against further disturbance or testing to prevent a spread in the pollution plume. It argues that it is impractical to remediate the tetracholoroethylene (PCE) in the area of the pipeline. It states that proper environmental assessment of the existing PCE plume would have

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[121] Islander East, 100 FERC at para.133.

given the Commission and Islander East the required information to evaluate the route of the pipeline. Therefore, it concludes that no tool exists for the parties to reach a valid conclusion that the present route was possible in light of the potential for subsurface spread of the existing PCE plume and the high potential contamination of potable water sources and Cedar Pond.

167. Environmental Condition No. 14 requires Islander East to conduct a site-specific study of this area before commencing construction. We note that the studies could not be performed prior to the certificate, because access to the land was restricted by the landowner. In addition, the condition specifically requires that the parameters and planning of the site-specific study will be determined with input from the Connecticut DEP and reviewed by the Commission environmental staff. This allows for a review of the site-specific plan prior to its implementation, regardless of who will be performing the study.

168. The Department of the Interior expressed concern about the potential movement of contaminated groundwater along the pipeline trench in the vicinity of Brookhaven National Laboratory (BNL), or resuspension of contaminants during construction restoration of the Peconic River crossing. The Department of the Interior recommended that Islander East consult with the BNL to determine where hot spots may occur along the proposed route. The Department of Interior also recommended that Islander East: (1) develop a contingency plan in the event the contaminated groundwater is encountered during construction; (2) ensure that changes in groundwater movement along the trench do not occur; and (3) develop and implement a post-construc-

tion monitoring and remediation program in coordination with BNL staff to ensure that any changes in contamination movements are detected and remediated.

169. The final EIS states that Islander East has already consulted with the BNL concerning contamination on the property and has determined that contaminated soil and groundwater are unlikely to be encountered during construction.[122] It states that general construction procedures, such as trench plugs, are required to ensure that changes in groundwater movement along the trench do not occur.[123] BNL staff can request a post-construction monitoring plan during easement negotiations if it is determined that this is necessary. Otherwise, Islander East would implement its Unexpected Contamination Encounter Plan. We believe that Islander East's previous consultations with the BNL and the construction procedures identified in Islander East's Erosion and Sedimentation Control Plan serve to adequately address the Department of Interior's concerns over contamination movement on BNL property.

11. *Archeological Testing*

170. North Branford objects to continued lack of sufficient information to adequately assess critical environmental and archeological factors in North Branford. It states that the limited testing that served as a basis for the tests extrapolated inaccurately that there are no items of cultural and historical significance. The Town of North Branford also questioned the accuracy of the archeological informa-

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[122] Final EIS at 3-141.

[123] Final EIS at section 3.3.1.2.

tion gathered by Islander East. The Commission addresses this argument in the September 19 order.[124] The parties have not raised any new arguments that would warrant that we revisit this issue. However, we note that all archeological surveys will be reviewed by the State Historic Preservation Officer (SHPO) as well as FERC staff prior to construction, as required in Environmental Condition No. 42.

12. *Construction Timing / HDD Drilling*

171. CT STP requests that Islander East not be allowed to construct the onshore portion of the pipeline until the HDD of the Connecticut shoreline has successfully been completed. As indicated in the final EIS, Islander East's original construction schedule called for the construction of the offshore section in the winter of 2002-2003, in order to meet the timing restrictions for the protection of aquatic life. The onshore work would follow in May 2003. In acknowledgment of the sensitivity of the Sound crossing and specifically the Connecticut shoreline, the order included environmental condition 21 which requires Islander East to complete successfully the pilot hole for the HDD before beginning any offshore work. The condition further requires Islander East to develop and file an alternative crossing plan in the event of an unsuccessful HDD.

172. On October 15, 2002, the Connecticut DEP denied Islander East's application for a CZMA consistency determination. Islander East subsequently withdrew its application to the COE for its Rivers and Harbors Act section 10 and Clean Water Act section 404 permit applications.[125] On October 23, 2002,

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[124] Islander East, 100 FERC at para.130.

[125] After the Connecticut DEP issued its notice of intent to

Islander East filed updated information with the Commission indicating that in light of recent events, it proposed to complete the onshore portion first, followed by the offshore section in the winter of 2003-2004.

173. The Commission continues to maintain that the successful completion of the HDD, or a suitable alternative, is essential to mitigate the near shore impacts. However, actual timing of that construction is uncertain. Therefore, we believe it is premature to modify Environmental Condition 21 to require that the HDD be completed before any onshore construction begins. The onshore construction does not have unresolved issues of the same magnitude, and is governed by numerous other conditions in the order. Accordingly, we will revisit this issue at such time as the project is nearer to actual construction and Islander East requests authorization to begin construction. We note that the start of both onshore and offshore construction cannot occur until Islander East complies with the conditions of the order. This includes receiving appropriate permits and filing an Implementation Plan for review and written approval of the Director of OEP.

174. The EPA requested that more information should be required to describe what constitutes drill failure, including how many drill attempts would be made before determining failure. In its December 11 filing, Islander East provided a description of its HDD technique. It also described possible failure

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deny Islander East's CZMA certification, Islander East requested a deferral of its COE permit application. The COE responded to Islander East's request by withdrawing its application without prejudice. *See* Islander East's December 11 filing at section 1, 1-1.

scenarios and estimates of the probability of those failures. We note that information concerning Islander East's HDD contingency plan is required under Environmental Condition No. 21, in the event that a failure occurs. In response to the comment concerning the recapture of offshore drilling mud, we note that a plan for the containment of drilling muds released to Long Island Sound is discussed in Appendix N of the final EIS. Further, Environmental Condition No. 22 requires that Islander East file the monitoring program plan in Appendix N with the Connecticut DEP and the New York State Department of Environmental Conservation for further consultation.

13. *Environmental Inspectors*

175. CT STP requests that Islander East fund a program whereby an affected municipality can hire its own consultant to monitor construction for environmental compliance. There are several avenues for a landowner or municipality to provide input on environmental compliance during construction, without requiring an independent consultant. Environmental Condition No. 7 requires that the Environmental Inspectors are responsible for documenting compliance with environmental conditions of the order, as well as any environmental conditions/ permit requirements imposed by other Federal, state or local agencies. The reports are filed with the Commission and are available on its web page. While the pipeline company generally only sends a copy of the cover letter to all parties on the service lists, individuals can request copies of the report directly from the pipeline company.

176. Similarly, Environmental Condition No. 8 states that on request, status reports will be provided

to other Federal or state agencies with permitting responsibilities. These status reports are to include a description of any landowner complaints that may relate to environmental compliance. In addition, Environmental Condition No. 32 requires that Islander East develop and implement a complaint resolution procedure to ensure that landowners are provided with clear and simple directions for identifying and resolving their environmental concerns. We believe these requirements are sufficient to allow individuals to be kept informed concerning the pipeline's compliance with the environmental conditions. However, individuals are free to negotiate the terms and conditions into their easement agreements with Islander East.

14. *Including Power Plants in EIS*

177. FWS states that the final EIS does not address impacts resulting from the construction and operation of any new generation facilities that may be associated with the project. It contends that 40 CFR 1508.7 requires "past, present, and future reasonably foreseeable actions" be included. FWS claims that because one of the primary purposes of the pipeline is to supply these facilities, it believes the Commission should have identified and quantitatively described impacts associated with these facilities as part of cumulative impacts.

178. The final EIS states that the Commission applies the four-factor procedure developed by the COE to determine if there is sufficient Federal control or responsibility over the project as a whole to warrant environmental analysis of related nonjurisdictional facilities.[126] Under the four factor test, the final EIS

[126] Final EIS at 1.4.

concluded that Federal control and responsibility is not sufficient to warrant an extension of the Commission's environmental review to include the nonjurisdictional facilities. However, the final EIS did address construction of customer facilities and reasonably foreseeable projects related to the proposed Islander East Project in the cumulative impact analysis in section 3.13 of the final EIS.

15. *Endangered Species*

179. FWS states that if measures incorporated in 3.6.4.1 are followed, the project is not likely to adversely affect the piping plover in New York. If they are not incorporated, it states that a biological assessment or further consultation will be required. Islander East is required to incorporate the requirements of 3.6.4.1 into the construction of the pipeline. Therefore, there would be no impact on the piping plover.

16. *Compensatory Mitigation*

180. FWS requests compensatory mitigation for impacts to waters of the U.S. that can not be avoided or reduced. It requests an opportunity to review and comment on any mitigation plans. As discussed in the final EIS, the COE may develop wetland compensation as part of its section 404 permitting process. FWS should deal directly with the COE on that issue.

17. *Other EPA Issues*

181. The EPA also questioned how Commission approval can come before the end of the typical 30-day waiting period. In accordance with the Council on Environmental Quality's (CEQ) regulations implementing NEPA, no agency decision on a proposed ac-

tion may be made until 30 days after the EPA publishes a notice of availability of a final EIS. However, where agencies have a formally established appeal process, such as the Commission's rehearing process, the agency may approve a project, subject to rehearing, at the same time as the final EIS is published.

182. Several issues raised by the EPA in its comments on the final EIS were addressed in greater detail in the final EIS, however, not in the sections referred to in the EPA's comment letter. For example, the EPA requested more details on extra workspaces mentioned in section 2 of the final EIS. Workspaces are discussed in detail in the final EIS in Appendix F and table 3.8.1-3, and are shown in the filed photo alignment sheets. Discussions of turbidity impacts which the EPA references on page 3-51 of the final EIS appear in greater detail in section 3.4.1 of the final EIS in reference to potential impacts on fisheries and shellfish. Similarly, the one line reference to open water that the EPA refers to on page 3-103 of the final EIS does not constitute the analysis of waterbodies. Section 3.3.2 of the final EIS discusses surface water and concentrates on waterbody crossings of less than 100 feet. Islander East also provides additional information on these issues in its December 11 filing.

183. The EPA also states that it needs more information concerning Islander East's conclusion that no blasting will be required in Long Island Sound. In response, Islander East states that it conducted geophysical surveys along the offshore portions of its route. It contends that based on the results of the side-scan sonar surveys, sub-bottom profiling, and geotechnical borings completed in offshore

waters, Islander East concluded that no bedrock is present within the uppermost eight feet of seabottom sediments to prevent installation of the pipeline. It states that blasting will not be required to install its pipeline across Long Island Sound. We find Islander East's conclusion that it will not need any underwater blasting acceptable. However, we note that if Islander East does determine if blasting is required, the Commission, the COE, and the appropriate state agencies will revisit that issue at that time and it will be subject to further review.

184. The EPA questioned whether the spacing of the samples for the offshore sediment sampling, discussed on page 3-43 of the final EIS would adequately represent the sediment chemistry of the Long Island Sound and questioned why BETX (benzene, toluene, ethylbenzene, and xylene) samples were conducted for New York and not Connecticut. Regarding the adequacy of sampling spacing, Islander East contacted the New York State Department of Environmental Conservation, Connecticut DEP, and COE to develop its offshore sediment sampling plan. Islander East states in its December 11, 2002 filing that no requests for changes were received from these agencies. An environmental condition was included that Islander East should file the sediment sampling data with the appropriate agencies for comments. Due to the very low levels of contaminants found in the samples and the fact that no concerns were raised in response to the draft EIS or the final EIS concerning the need for additional sampling, the Commission believes that the spacing of the samples was adequate.

185. Concerning EPA's question about BETX sampling, Islander East states that a BETX analysis was

required by the New York State Department of Environmental Conservation, whereas the Connecticut DEP does not normally require this analysis unless there is a specific reason to expect these compounds to be present, such as a dredged disposal area or known spill location, neither of which would be crossed.

186. The EPA requests a detailed cross section of the HDD exit basin. The detailed cross section of the HDD exit basin can be found in Islander East's April 1, 2002 filing, tab 23, in a report entitled "Marine Pipeline Installation Methodology." The EPA requests more information concerning the proposed biocide and the conditions under which it is proposed to be discharged. Specific information concerning the THPS-based biocide that would be used in the hydrostatic test water for the Long Island Sound was filed by Islander East on April 30, 2002, tab 10. The filing includes a letter to the New York State Department of Environmental Conservation that provides product data, the material safety data sheet, and neutralization and toxicity data for the biocide.

187. The EPA states that the analysis of blasting of the Muddy River does not describe why other less environmentally damaging alternatives are not practical. Due to the steep, rocky topography in the area, alternative crossing techniques, such as ripping or hammering, would disturb the area for a longer period of time, resulting in greater environmental disturbances. Discussion of the Muddy River is located on page 3-35 of the final EIS, and in greater detail in Islander East's April 1, 2002 filing, tab 13. The filing responds to the Connecticut Siting Council's request for information on the crossing and includes a photo alignment sheet, topographic profile, and Muddy

River's location relative to the adjacent Mill Road. Islander East provides additional information concerning the Muddy River and other issues raised by the EPA in its December 11 filing. We find Islander East's responses acceptable.

The Commission orders:

(A) The requests for rehearing are granted in part, and denied in part as discussed above.

(B) The Connecticut DEP Commission's motion to intervene out-of-time is denied.

(C) Islander East's motion to file an answer is granted.

(D) The Connecticut AG's motion for a stay is denied.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

APPENDIX F

UNITED STATES OF AMERICA
100 FERC ¶ 61,276
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey,
Linda Breathitt, and
Nora Mead Brownell.

Islander East Pipeline Company, L.L.C.
Docket Nos. CP01-384-000, -001
CP01-385-000, -001
CP01-386-000, -001

Algonquin Gas Transmission Company
CP01-387-000, -001

ORDER ON REHEARING AND
ISSUING CERTIFICATES
(Issued September 19, 2002)

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1. On December 21, 2001, the Commission issued a Preliminary Determination (PD) in these proceedings addressing the nonenvironmental issues raised by Islander East Pipeline Company, L.L.C.'s (Islander East) and Algonquin Gas Transmission Company's (Algonquin) proposals to construct, own, operate, and lease capacity for a new interstate pipeline to transport gas in Connecticut and Long Island.[1] Final certificate authority was reserved pending completion of the environmental review then being conducted of the proposal.

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[1] Islander East Pipeline Co., L.L.C. (Islander East), 97 FERC ¶ 61,363 (2001).

2. Timely requests for rehearing of the December 21 order were filed by the Town of Branford, Connecticut (Branford), Algonquin, and the Southern Connecticut Gas Company and Connecticut Natural Gas Corporation (jointly, Connecticut Companies). The Connecticut Attorney General (Connecticut AG), the Central Pine Barrens Joint Planning and Policy Commission (Pine Barrens Commission), the Long Island Pine Barrens Society (Pine Barrens Society), and Jerry C. Shaw filed untimely requests for rehearing.[2]

3. We have now completed our environmental analysis of the proposal. In this order, we will consider and evaluate the environmental issues raised by Islander East's and Algonquin's applications and grant, in part, and deny, in part, the requests for rehearing and reconsideration. We find that our approval of this proposal will benefit the public interest because it will increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources and increased availability of gas for anticipated electric generation projects. Additionally, it will introduce pipeline-to-pipeline competition to eastern Long Island markets.

4. Further, while we recognize that the Governor of Connecticut and the Connecticut Legislature have imposed moratoriums on utility crossings in Long Island Sound, as discussed below, we find it is in the

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[2] Section 19 of the Natural Gas Act (NGA) requires that a party file a request for rehearing within 30 days of the date of issuance of the order being contested. The statute does not grant the Commission authority to waive that requirement at its discretion. Therefore, we lack the authority to accept a late request for rehearing. However, we will address the concerns raised as requests for reconsideration.

public interest to issue Islander East's and Algonquin's requested certificate authorization at this time. The Commission has imposed numerous environmental conditions that require extensive consultation between the pipeline applicants and local agencies, including, among others, the Connecticut Department of Environmental Protection, before they can commence construction of the proposed facilities. The Commission believes it is imperative to issue this order at the time to allow Islander East and Algonquin to proceed with their proposed projects in a timely manner. Therefore, we will grant the requested certificate authorities, as modified and conditioned below.

I. *Background*

5. Islander East proposes to construct and operate a pipeline that will extend from an interconnection with Algonquin's existing C-System near North Haven, Connecticut, across Long Island Sound and terminate near Brookhaven, New York on Long Island. Islander East intends to provide transportation service to the KeySpan Gas East Corporation, d/b/a KeySpan Energy Delivery Long Island and The Brooklyn Union Gas Company, d/b/a KeySpan Energy Delivery New York (jointly KeySpan Delivery Companies). In addition, Islander East intends to provide transportation service to two power producers: (1) AES Endeavor, a division of AES Corporation (AES Calverton) and (2) Brookhaven Energy Limited Partnership, an affiliate of American National Power (ANP Brookhaven).

6. Islander East's proposed project will transport 260,000 Dth per day of natural gas on a firm basis to

markets on Long Island, New York.[3] The facilities will consist of, among other things, approximately 44.8 miles of 24-inch pipeline. Approximately 22.6 miles of the pipeline will be located offshore in Long Island Sound. Approximately 10.2 miles of the pipeline will be located onshore in Connecticut and approximately 12 miles will be located onshore in Long Island.

7. As part of the Islander East Project, Islander East intends to lease certain facilities from Algonquin's C-System. In Docket No. CP01-387-000, Algonquin proposes to construct a 10,310 horsepower compressor station near Cheshire, Connecticut at the beginning of its C-System, upgrade the current maximum allowable operating pressure (MAOP) of the C-System pipelines from 750 psig to 814 psig, repair two segments of pipe on the C-System, and relocate two pig launchers at the new Cheshire Compressor Station to increase the capacity on the C-System by the 260,000 Dth per day needed to provide the lease service for Islander East. The lease arrangement eliminates the need for Islander East to construct approximately 27 miles of new pipeline facilities.

8. In the December 21 order, the Commission found, based on consideration of all nonenvironmental issues, that issuance of certificates of public convenience and necessity to Islander East and Algonquin under the terms and conditions prescribed in the December 21 order would be in the public

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[3] Islander East's facilities are designed to transport the design capacity of 260,000 Dth per day and up to 285,000 Dth per day when factors change on Algonquin's C-System. *See* Islander East, 97 FERC at 62,698-99.

convenience and necessity if the environmental review were satisfactory. The Commission also found that Islander East's and Algonquin's proposed construction is consistent with the Policy Statement's criteria.[4]

II. *Procedural Issues*

A. *Late Interventions*

9. Meadowcrest Corporation (Meadowcrest) filed a motion to intervene on environmental grounds and a motion to intervene out-of-time. It states that Meadowcrest IV is a residential community and that the proposed route of the Islander East pipeline will go directly through this community in New York. Meadowcrest states that it did not become aware of the impact of the Islander East's proposed project until it received the draft environmental impact statement (EIS). Therefore, it contends that good cause exists to allow its motion to intervene out-of-time.

10. In response, Islander East states that it when it first planned its route in the Meadowcrest area, the relevant land parcel was owned by Mr. Bernard F. May. It states that Mr. May subsequently sold the property to the current owner, Mr. Strecker. Islander East states on May 25, 2001, it contacted Mr. Strecker, by phone and by letter, advising him that a pipeline would cross a portion of the property he planned to develop and to request permission to survey the parcel. Islander East states that Mr.

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[4] Certification of New Interstate Natural Gas Pipeline Facilities (Policy Statement), 88 FERC ¶ 61,227 (1999), *orders clarifying statement of policy*, 90 FERC ¶ 61,128 and 92 FERC ¶ 61,094 (2000).

Strecher denied its survey request made on May 25 and other subsequent requests.

11. When late intervention is sought after the issuance of a Commission order, the prejudice to other parties and burden upon the Commission of granting the late intervention may be substantial. Thus, movants bear a higher burden to demonstrate good cause for the granting of such late intervention.[5] While Mr. Strecker, the current developer of Meadowcrest IV, claims he was not aware that the proposed pipeline would impact the development until the draft EIS was issued, the correspondence with Islander East demonstrates that not only did it contact him concerning the project before the application was filed, it requested permission to survey the property "to make a more accurate determination of the impact . . . of the proposed pipeline on your property."[6]

12. In our view, Meadowcrest has not demonstrated good cause for failing to file a timely request for intervention. Therefore, we will deny Meadow-

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[5] *See* North Baja Pipeline L.L.C., 99 FERC ¶ 61,028 at 61,109-10 (2002).

[6] Attachment I to Islander East's July 23, 2002 reply to comments of Meadowcrest Corporation. The letter states that the surveying would require staking and flagging. Had Mr. Strecker allowed Islander East to survey the property prior to filing its application, he would have been fully aware of how the pipeline would have impacted his property before Islander East filed its application on June 15, 2001. In the May 25 letter, Islander East also requests a site plan map of the subdivision to include in its application. In its reply to Meadowcrest Corporation's comments, Islander East states that it did not receive any subdivision plans from Mr. Strecker until June 19, 2002 and that the plans it received did not disclose the proposed location of all the unbuilt residences.

crest's motion to intervene out-of-time. However, under sections 157.10(a)(2) and 380.10(a)(1)(I) we will grant Meadowcrest's motion to intervene on environmental grounds.

B. *Answers to Rehearing Requests, Motion to Consolidate, and Subsequent Filings*

13. Islander East filed a reply and Algonquin filed an answer to the requests for rehearing and reconsideration. Iroquois Gas Transmission System, L.P. (Iroquois) filed an answer to Islander East's reply and the Connecticut Companies filed an answer to Algonquin's answer. The Pine Barrens Society filed a request for a joint review of the Islander East Project and Iroquois' Eastern Long Island (ELI) Project filed in Docket No. CP02-52-000.[7] Islander East filed a reply to Iroquois' answer and the Pine Barren Society's request for joint review. KeySpan Delivery Companies filed an answer to Iroquois' answer to Islander East's reply. The Connecticut AG filed an answer to Islander East's reply to Iroquois' answer and the Pine Barren Society's request for joint review.

14. The Connecticut AG, the Pine Barrens Society, and Iroquois filed individual motions to consolidate the Islander East proceeding with Iroquois' ELI

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[7] On December 14, 2002, Iroquois filed an application in Docket No. CP02-52-000 for authorization to construct its Eastern Long Island Expansion Project (ELI Project). The ELI Project, among other things, would provide approximately 175,000 Dth per day of firm transportation service to Eastern Long Island. Iroquois' proposed facilities would commence at an interconnect with Iroquois' existing mainline facility located in Long Island Sound. Downstream on Long Island, Iroquois' proposed pipeline would run parallel to Islander East's proposed pipeline.

Project. Islander East filed separate replies to the Connecticut AG in this proceeding and a response to Iroquois in Docket No. CP02-52-000. KeySpan Delivery Companies and Brookhaven Energy Limited Partnership (Brookhaven Energy) also filed responses to the motions to consolidate.[8]

15. Although the Commission's procedural rules prohibit answers to answers, we may, for good cause, waive this provision.[9] We find good cause to do so in this instance in order to insure a complete record in this proceeding. The parties filings are addressed below.

III. *Discussion*

A. *Motions to Consolidate and Requests for Joint Review*

1. *Requests for Consolidation*

16. As stated, the Pine Barrens Society, the Connecticut AG, and Iroquois filed motions to consolidate the Iroquois and Islander East proceedings. The Pine Barrens Society generally raises environmental concerns and requests that the Commission review the feasibility of Islander East and Iroquois operating a jointly-owned, single pipeline once their respective pipelines reach the mainland of Long Island.

17. The Connecticut AG states that both projects will reach landfall at the same point in Long Island, and, to all appearances, will serve the same markets. It contends that the two applications have common

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[8] The Preliminary Determination in the Iroquois proceeding in Docket No. CP02-52-000 is being issued concurrently with this order.

[9] 18 CFR § 385.213(a)(2)(2002).

issues of fact, particularly with respect to environmental matters and issues of public need and convenience. Therefore, it concludes that the Commission should consolidate the two proceedings in order to determine whether either or both projects are needed and, if only one is needed, which project will best provide the necessary service to the public with the least adverse impacts.

18. Iroquois states that a comparative evidentiary hearing is warranted because the applications involve common questions of fact and law and raise common issues regarding their environmental impact. It contends that the Commission should address these critical factual legal issues in a consolidated comparative hearing when it exercises its statutory responsibilities under the NGA and NEPA.

19. Iroquois and the Connecticut AG contend that under *Ashbacker Radio Corp. v. FCC (Ashbacker)*,[10] where two *bona fide*, timely-filed applications are pending before an agency and the grant of one would either foreclose the grant of the other or place it under greater burden than it would have been under had it been considered at the same time as the first application, a comparative hearing on the merits of the two applications is required. Iroquois claims that authorizing the Islander East project would foreclose the development of the Iroquois ELI Project or, at the very least, place it under a greater burden. Therefore, it argues that consolidating the Islander East and Iroquois applications for a comparative hearing is consistent with the fundamental rationale underlying *Ashbacker*.

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[10] 326 U.S. 327, 329-31 (1945).

20. Iroquois contends that the three specific preconditions for applying *Ashbacker* are satisfied in this instance. First, it claims that its application is *bona fide* in that it has been filed with and is presently pending before the Commission. Second, it states that the application was timely filed. Iroquois states that when the Islander East application was filed on June 15, 2001, Iroquois advised the Commission, in its motion to intervene, that it intended to filed an application for the ELI Project. Therefore, it believes that the Commission and all interested parties were on notice that it intended to file a competing application, which it states was filed in a timely fashion within six months of the Islander East filing.

21. Further, Iroquois contends that the two proposals are mutually exclusive because the grant of one would effectively preclude the grant of the other. Iroquois argues that both pipelines would serve the same market area, specifically the load growth in Eastern Long Island. Iroquois contends that either pipeline can be expanded to provide 500 MMcf per day of new pipeline capacity. It asserts that both pipelines ultimately tap into the same supply sources located off Sable Island, Canada. Further, Iroquois contends that even though the sponsors of the two pipeline projects have signed precedent agreements with different shippers, the projects effectively will serve the same end-use market, which will not grow at a rate fast enough to support both projects.

22. Iroquois states that the *Ashbacker* doctrine has been found not to apply where two projects serve two

completely independent sets of customers.[11] However, it contends that the fact that the pipeline serves different customers should not be determinative of whether there is "economic" mutual exclusivity between the competing projects. Iroquois contends that notwithstanding the difference in the identity of the shippers, there is an overlap with respect to the end-use market which those shippers serve. Therefore, Iroquois concludes that the shippers that have executed precedent agreements reserving capacity on Islander East's and Iroquois' projects in fact represent different links in the supply chain that will serve the same end-use market on Eastern Long Island. As such, Iroquois reasons that the projects are mutually exclusive because should one project receive approval, the remaining project would be effectively precluded by the insufficient demand for an additional source of gas in the Eastern Long Island market.

23. Iroquois argues that the fact that the two projects propose different commencement dates should be of no consequence for purposes of considering their competitiveness and mutual exclusivity. It contends that external circumstances have greatly reduced the likelihood that Islander East will maintain the schedule proposed by its sponsors. Iroquois points to: (1) delays in the electric generation coming on line on Long Island and the likelihood that gas service for those facilities will not be required until 2004 or 2005

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[11] *Citing* ANR Pipeline Co. (ANR), 78 FERC ¶ 61,326 (1997), *order issuing certificate and denying reh'g*, 85 FERC ¶ 61,056 (1998), *affirmed*, ANR Pipeline Co. v. FERC, 205 F.3d 403 (D.C. Cir. 2000).

and (2) attempts by Connecticut to limit the construction of utilities across Long Island Sound.[12]

24. Iroquois also states that NEPA requires that the Commission analyze reasonable alternatives and that the draft EIS issued in the Islander East proceeding recognizes that the ELI Project is a potential alternative to Islander East. It contends that the Iroquois alternative has a significant environmental advantage over Islander East in that it reduces the environmental impacts that are certain with the Islander East proposal, while still achieving the objectives of the proposed project.

25. Finally, Iroquois claims that the Commission has consolidated proceedings where there are similarities and overlap between pipeline proposals.[13] It argues that there are similarities that overlap between the two proposed projects, particularly with respect to environmental matters, and consolidation of common issues would foster administrative efficiency, avoid duplication of effort, and generally serve the public interest.

2. *Parties Response*

26. In response, Islander East states that its shippers chose service on its project because of their desire to ensure the reliability of their contracted

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[12] On April 12, 2002, the Governor of Connecticut issued Executive Order No. 26 that prohibits state agencies from approving any utility projects that cross Long Island Sound, among other things, until June 15, 2003. Similarly, on June 3, 2002, the Connecticut Legislature enacted Public Act No. 02-95, which imposed a one-year moratorium on utility crossings in Long Island Sound.

[13] *Citing* American Natural Rocky Mountain Co., 21 FERC ¶ 61,229 (1982).

transportation service.[14] Islander East asserts that because its facilities will establish a second transmission system across Long Island Sound, it is uniquely able to meet the needs of these shippers and the entire region for improved security and reliability. Moreover, it states that Islander East is able to meet those needs on a timely basis. It contends that its shippers, particularly KeySpan Delivery Companies, require service in the fall of 2003. Islander East claims that Iroquois' Motion to Consolidate represents a continued, unjustified, and inappropriate collateral attack on Islander East's PD by a competitor seeking to block the construction of new capacity into Connecticut and Long Island.

27. Islander East contends that Iroquois does not have a *bona fide* application. It states that the mere fact that it filed an application does not make it *bona fide*. Islander East states that Iroquois' motion undermines its ELI Project application by expressing a lack of confidence in the project and the market it serves. It contends that the claimed *bona fides* of Iroquois' proposal are betrayed by the fact that, unlike Islander East, Iroquois apparently does not have sufficient faith in its project to build a pipeline on the basis of its application as filed with the Commission.

28. Islander East also argues that Iroquois' ELI Project is not timely filed. It states that Iroquois filed its application six months after Islander East's application was filed. Islander East points out that the Commission has stated that:

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[14] Islander East points out that at the Commission's Northeast Energy Infrastructure Conference held on January 31, 2002, reliability was a prevalent theme.

> [i]t seems clear to us that the filing of certificate applications and requests for comparative hearing must be reasonably simultaneous in time and indicate potential exclusivity on the face of the applications before an imperative application of the Ashbacker doctrine is called for.
>
> Thus the alleged exclusivity involved here is one of potential saturation of a given market. But the timing of the applications for a certificate to serve any market is of the essence in determining whether due process requires a comparative hearing. It is scarcely reasonable that applicant B who files an application for a certificate 6 months later than applicant A should be able automatically to require a retroactive consolidation when A's proceeding is well along towards its conclusion.[15]

Islander East asserts that it is not reasonable that two projects, filed six months apart, should be consolidated, particularly where those projects seek to serve entirely different shippers and thus, on their face are not mutually exclusive.

29. Islander East argues that the two projects do not propose to serve even a single common shipper. It further asserts that service under the two proposals is provided in different time frames. Islander East states that Iroquois argues that the Commission should ignore the fact that the two projects have precedent agreements with different sets of shippers because Iroquois proposes to serve marketers and gas suppliers who could, in turn, serve the end users and

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[15] *Citing* Transwestern Pipeline Co., 21 FPC 594 (1959), *followed in* Mohave Pipeline Co., 41 FERC ¶ 61,040 at 61,119 (1987).

utilities who have contracted for service on Islander East, thereby enhancing competition.

30. Islander East asserts that Iroquois' argument is predicated on the complete collapse of the various market segments into a single segment, a notion which Islander East claims both defies reality and flies in the face of years of government effort to foster the development of multiple market sectors. Additionally, Islander East contends that preferring a pipeline that serves intermediaries rather than end users turns the competition argument on its head. Islander East states that such a preference would curtail market choices, foreclosing the ability of end users and utilities to purchase service directly rather than through middlemen. Islander East argues that Iroquois' reference to one generalized, geographic market on Eastern Long Island suggests again that Iroquois has no faith in the viability or firmness of its precedent agreements, and that Iroquois is contemplating the construction of a pipeline "on spec".

31. Islander East also contends that Iroquois' claim that there is only one generic Eastern Long Island market, and that the ELI Project is a superior alternative for serving that market, does not advance its consolidation request. Islander East asserts that the Commission has rejected such claims.[16]

32. Islander East contends that Iroquois fears that if Islander East is built, Iroquois' own shippers will have more of an incentive to walk away from the ELI Project. It states that the fact that Iroquois based its application on precedent agreements and economic arrangements which may not pan out is a risk Iroquois took, not a risk imposed on Iroquois by

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[16] *Citing* ANR, 78 FERC at 62,405-06.

Islander East. Islander East asserts that the whole concept of the market determining viability of pipeline proposals would be turned on its head if, when a project sponsor lost confidence in the commitment of its shippers, it could invoke *Ashbacker* to impede the progress of another project which was prepared to proceeding with its proposal. Islander East states that the Commission should follow its longstanding policy of allowing projects to proceed on the strength of markets presented in their applications, and letting the market determine whether one or both projects should be constructed.

33. Islander East also asserts that Iroquois' invocation of NEPA as a basis for consolidation is wrong. It points out that the draft EIS in the Islander East proceeding plainly fulfills the Commission's obligation under NEPA to analyze the environmental consequences of the proposed Islander East project, as well as alternatives to it. Islander East also asserts that Iroquois' premature claim that its ELI Project is environmentally superior is not justification for a consolidation as such a determination has not been made. Further, Islander East claims that even if the Commission were to determine that the ELI Project offers some environmental advantage, that advantage would not be dispositive. Beyond its contention that any such advantage is likely to be negligible, Islander East states that the Commission is not constrained by NEPA from deciding that other values outweigh the environmental costs[17] and that it has approved projects for countervailing policy

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[17] *Citing* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) and Southern Natural Gas Co., 76 FERC ¶ 61,122 at 61,646 (1996).

reasons.[18] Islander East states that there would be every reason for the Commission to do so here, where the claimed Iroquois ELI Project advantage is outweighted by the security and reliability benefits of Islander East's creation of a second gas transmission line across Long Island Sound.

34. Finally, Islander East states that contrary to Iroquois' claim, consolidation of the projects would result in administrative havoc, not administrative efficiency. It states that the Commission has stated that a comparative hearing is inherently a time consuming resolution process which frustrates the objective of timely development of reliable transportation infrastructure.[19] Islander East states that the Commission has issued both the PD and the draft EIS for Islander East while Iroquois has secured neither of these. Islander East contends that interrupting the Islander East proceeding and complicating it by consolidating the ELI Project, would not only be administratively inefficient, but would be patently unfair to Islander East. Moreover, it argues that the regulatory uncertainty so created would be unfair to numerous parties, including Islander East's shippers, developers and their financial backers, and the end-users.

35. In response, to Iroquois' motion to consolidate, KeySpan Delivery Companies state that they have entered into precedent agreements with Islander East for firm transportation service up to a maximum daily quantity that increases from 110,000 dth in the first year to 295,000 Dth in the fifth year of oper-

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[18] *Citing* Southern Natural Gas Co., 79 FERC ¶ 61,280 at 62,205 (1997).

[19] *Citing* ANR, 78 FERC ¶ 62,405.

ation. They state that the precedent agreements contemplate that service on the pipeline will commence on or about November 1, 2003. KeySpan Delivery Companies state that they require the additional gas supplies to be provided by Islander East to ensure that they have sufficient natural gas supplies to reliably serve the needs of their firm customers during the winter of 2003-2004.

36. KeySpan Delivery Companies state that they have public service obligations to provide safe and adequate gas distribution services to consumers in the Boroughs of Brooklyn, Queens, and Staten Island in New York City and on Long Island. KeySpan Delivery Companies state that they currently serve approximately 1.8 million customers, most of whom are residential and small commercial customers who use natural gas for life sustaining uses such as heating and cooking.

37. KeySpan Delivery Companies state that they are not only customers of Islander East, they are also Iroquois' largest firm transportation customers. They assert that Iroquois is currently the only transmission pipeline that serves Suffolk County, Long Island. Such service is through a single delivery point. KeySpan Delivery Companies contend that disruption of existing firm service from Iroquois for any significant period could require KeySpan Delivery Companies to curtail service to up to approximately 124,000 customers on Eastern Long Island. They state that such curtailments would have a significant and possibly disastrous impact. KeySpan Delivery Companies state that with the addition of Islander East, they believe that a loss of service from either Islander East or Iroquois would not require that they curtail service to any firm customer.

Therefore, they conclude that the construction of Islander East significantly enhances the reliability of KeySpan Delivery Companies' distribution services.

38. KeySpan Delivery Companies assert that its reliability concerns extend not only to gas distribution but also to the cost and reliability of electric supply. They state that Iroquois is the single interstate natural gas pipeline currently delivering gas for use in its generating plants in Suffolk County. They contend that reliability rules issued by the New York Reliability Council require planning for the single failure of any gas pipeline. KeySpan Delivery Companies state that the expansion of Iroquois to the exclusion of Islander East would significantly complicate and potentially compromise their ability to comply with the reliability standards. Further, KeySpan Delivery Companies state that its Delivery Companies require additional gas supplies that will be provided by the Islander East Project to ensure sufficient supplies to serve the needs of their customers during the winter of 2003-2004.

39. Brookhaven Energy raises arguments similar to those raised by Islander East and KeySpan Delivery Companies. Brookhaven Energy also argues that the Commission's current policy place both Iroquois and Islander East at risk with respect to their expansion projects and allow competition and consumer choice, rather than the Commission's administrative process, to decide whether either or both of the proposed projects will succeed. Therefore, it requests that the Commission "decline Iroquois' invitation to overturn its current policies on the certification of new pipeline projects and to substitute its judgment for the judgement of market forces in

determining how increasing demands for natural gas service on Long Island will be met."[20]

40. The New York Public Service Commission (PSC) asserts that while Islander East and Iroquois' ELI Project are slated to serve a distinct set of customers, it may be possible to meet all of eastern Long Island's requirements with a single project. However, the New York PSC contends that if only one pipeline is built, the competitive market and downstream system situation should weigh heavily in the process of deciding which project should be certificated. The New York PSC states that while Iroquois' ELI Project is shorter and could pose fewer environmental impacts, it uses a portion of the existing Long Island crossing. New York PSC asserts that a totally separate Sound crossing, as proposed by Islander East, provides contingency protection for both gas and electric systems against a total loss of supply if damage were to occur to the Iroquois line upstream of the interconnection to the ELI facilities. The New York PSC states that given the current information, if one line were to be built, its preference would be that Islander East be certificated because it will provide another source of delivery to Long Island.

3. *Commission Response*

41. In *ANR*, the Commission addressed the applicability of *Ashbacker* in a post-Order No. 636 environment. In that case, ANR and Nautilus Pipeline Company (Nautilus) proposed to construct similar facilities that essentially ran parallel to each other in the Outer Continental Shelf. While ANR had filed its application at approximately the same time

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[20] Brookhaven Energy's answer to motion to consolidate at 3.

as Nautilus, the processing of ANR's application was delayed because it did not submit the information necessary for the Commission to assess its project's environmental impacts. Subsequently, ANR requested that the Commission consolidate its application with the Nautilus application because if Nautilus was built, "it would likely foreclose ANR's project or place it under a greater burden."[21]

42. The Commission determined that ANR's position amounted to a claim that in all circumstances *Ashbacker* requires the Commission to intervene in order to resolve a business competition between parties, if there is a possibility that the loser of the competition would ultimately decide the better part of discretion is to withdraw from the field. The Commission found that this is too rigid a view of *Ashbacker* that would result in an application of that rule in a manner that would undermine the public interest considerations of the NGA. The same reasoning applies to Iroquois' position here.

43. In *ANR*, the Commission explained that *Ashbacker* was decided when the prevailing approach to regulation, not just at the Commission but before other regulatory bodies, was far different than it is today. Under that approach, federal agencies were called upon to apply their judgment and expertise to protect the public from large corporations wielding significant market power. At that time, the winner of a battle for the right to use a particular radio frequency, airline route, or pipeline route would be guaranteed a virtual monopoly in that market because the proposals were truly mutually exclusive. In some instances, such as where there was only one

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[21] ANR, 78 FERC at 62,398.

radio frequency that remained to be assigned, the mutual exclusivity resulted from the "physical" impossibility of approving more than one application. In other instances, however, the mutual exclusivity arose because the prevailing regulatory approach was for agencies to address public interest considerations by examining the specific economic justification for a proposal. When an agency was confronted with competing proposals, the agency needed to determine which one, in its judgment based on the record, would best serve the public interest and then approve only that project to operate under close regulatory scrutiny of its rates and services.

44. Thus, the traditional regulatory model required careful comparison of competing proposals, because only one could be granted. The monopolistic advantages conferred on the winner would effectively bar others from entering that market and, absent close oversight of the winner's rates and services, would leave consumers subject to exploitation. In the pipeline industry, as well as in other industries that have undergone partial or complete deregulation, that is no longer the case. In *ANR*, the Commission determined that a rigid application of *Ashbacker* principles, without regard to changed circumstances in industries undergoing deregulation, is likely to have harmful results for the public and serve no valid purpose in protecting a competitor's right to a hearing on its proposal.[22]

45. Iroquois contends that if Islander East were to be constructed, there is not a sufficient market in the near future to support both projects, foreclosing its opportunity to construct its ELI Project. However, as

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[22] *See* ANR, 85 FERC at 61,175.

discussed below, the Commission finds that the two proposed projects will serve different shippers and that there is sufficient forecasted long-term market growth to support the Commission's approval of both proposed projects. Therefore, for purposes of the *Ashbacker* doctrine, the two projects are not mutually exclusive and our approval of Islander East will not necessarily foreclose Iroquois from constructing the ELI Project.

46. Under the NGA, the Commission is charged with furthering the public interest in authorizing the construction and operation of interstate natural gas pipelines. This entails consideration of many interests and goals. As Congress, the Commission, and the courts have interpreted it over the decades, this mission includes, among other things, the assurance of adequate supplies of natural gas to consumers, and the assurance of adequate competition among suppliers to cut costs and improve market conditions for the benefits of consumers.

47. In the Islander East proceeding, Islander East is proposing to construct facilities to provide up to 285,000 Dth per day of service to New York City and Long Island. Islander East's precedent agreements with its shippers include provisions under which they could increase their levels of service up to 445,000 Dth per day by 2008.[23] A marketing study provided by Islander East in its application estimates that peak demand for natural gas for KeySpan Delivery

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[23] Islander East would, of course, have to apply for and receive, certificate authority to construct the facilities as necessary to provide those additional increments of service.

Companies alone will grow to 468,000 Dth per day by 2010.[24]

48. Six months after Islander East filed its application, Iroquois filed an application in which it proposed to construct facilities to provide 175,000 Dth per day of capacity to Eastern Long Island. Although Iroquois only proposed to construct facilities to provide for 175,000 Dth per day of firm capacity, it asserted that it had precedent agreements for 340,000 Dth per day of capacity.[25] However, approximately two months after filing its application touting a demand for approximately twice the capacity it proposed to construct, Iroquois filed a pleading in this proceeding claiming that there is not enough demand to support both pipelines and further, if Islander East builds its pipeline, there will be no customers for the 175,000 Dth per day of capacity being proposed by Iroquois.[26] To support its argument in this proceeding, Iroquois, too, included a marketing study. Iroquois' study estimates that the New York/Long Island market is estimated to increase to only approximately 475,000 Dth per day by the year 2010.

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[24] This projection does do not include the volumes that Islander East would transport directly to its other shippers in this project, AES Calverton and ANP Brookhaven. Service to these shippers under the current proposal totals an additional 150,000 Dth per day.

[25] Iroquois stated that it would make any decisions concerning the need to pro-rate capacity among its shippers no later than March 1, 2003.

[26] Iroquois first raised its belief that there would not be sufficient demand to construct the ELI Project in its February 19, 2002 answer to Islander East's February 6, 2002 reply to the requests for rehearing. Iroquois subsequently repeated its contention in its Motion to Consolidate filed on April 8, 2002.

49. As discussed above, the precedent agreements filed by Islander East and Iroquois in their respective proceedings demonstrate a potential market for 785,000 Dth per day of capacity by 2008 (340,000 Dth per day by 2004 for Iroquois and 445,000 Dth per day by 2008 for Islander East). The market studies filed in support of the applications project market demands of at least 475,000 Dth per day (Iroquois) or 618,000 Dth per day (Islander East) by 2010. Thus, regardless of which measure of future market demand the Commission relies on, the evidence in the record clearly supports a finding by the Commission that the long-term New York/Long Island market can support the 460,000 Dth per day (285,000 Dth per day for Islander East and 175,000 Dth per day for Iroquois) being proposed by both Islander East and Iroquois in their pending applications.

50. Commission policy dictates allowing the market to determine which projects are best suited to serve the infrastructure needs of an area. The Commission believes this approach best serves the public interest and allows for the most efficient, cost effective, and timely development of pipeline infrastructure. A market-oriented approach not only allows attainment of the Commission's objectives in the short term, but it is consistent with the long-term market-oriented policy goals the Commission has followed for over 15 years. Approval of a variety of projects benefits the public by allowing it to choose which of the available proposals offers the most attractive and timely service.

51. By approving both proposals, the Commission gives both pipelines the opportunity to compete on a level playing field, which is the essence of *Ash-*

backer.[27] Allowing market forces to determine the success or failure of the projects is the most efficient mechanism to assure the maximum use of facilities. The fact that the two projects follow similar routes and terminate at points proximate to each other does not require a finding that the two projects are mutually exclusive. The Commission has determined that allegedly competitive proposals do not rise to the level of mutual exclusivity if the proposals differ in terms of facilities proposed, incremental capacity, capital costs, customer beneficiaries, or intended benefits.[28]

52. Iroquois argues that the fact that the pipelines will serve different customers should not be determinative of whether there is "economic" mutual exclusivity between them. It claims that notwithstanding the difference between the identity of the shippers, there is an overlap with respect to the end-use market which such shippers serve.

53. Islander East's shippers consist of two proposed electric generation plants and the KeySpan Delivery Companies,—gas distribution, electric generation, and electric transmission companies. Iroquois' shippers consist of a state-owned power provider, an electric retailer, and three gas marketers. In essence, Iroquois is requesting that the Commission conduct an *Ashbacker* hearing to determine if Islander East's end-user shippers would be better served by Iroquois' marketer shippers. Such a request is contrary to the Commission's longstanding

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[27] Committee for Effective Cellular Rules v. FCC, 53 F.3d 1309 at 1320 (D.C. Cir. 1995).

[28] ANR, at 62,405, *citing* Northern Natural Gas Co., 51 FERC ¶ 61,316 at 62,052-53 (1990)

policy of allowing customers to choose their own service providers.

54. We also note that Iroquois' precedent agreements with gas marketers account for approximately 41 percent, or 140,000 Dth per day, of the 340,000 Dth per day of capacity that it claims it has subscribed under its precedent agreements. Even if its marketer shippers fail to sign final contracts for the ELI Project, Iroquois still has 200,000 Dth per day of capacity subscribed under precedent agreements for its proposed design capacity of 175,000 Dth per day with potential end users who differ from those who subscribed to Islander East's project. While Iroquois may argue that its prospective electric generation shippers may not proceed with their proposed gas-fired electric generation facilities if Islander East's electric generation shippers proceed with theirs, it is beyond the role of the Commission in these proceedings to interfere with the business decisions of such customers.

55. For the reasons discussed above, Iroquois' claim, made in numerous filings in this proceeding, that it will be foreclosed from constructing its ELI Project if Islander East is constructed is without factual predicate. As stated, in its application for its ELI Project, Iroquois filed precedent agreements for twice the amount of capacity it proposed to construct in that proceeding. While Iroquois' precedent agreements, among other things, give almost all of its shippers an unrestricted right to terminate those contracts for any reason prior to April 2002,[29] Iroquois

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[29] The precedent agreement with Long Island Lighting gives it the right to terminate its contract for any reason until June 2005.

has not filed any updated evidence in its ELI Project proceeding indicating that any of its prospective shippers may have terminated their contracts.

56. Further, the Commission has determined that allegedly competitive proposals do not rise to the level of mutual exclusivity if the proposals differ in terms of intended benefits. The proposed Islander East Project provides two significant benefits that Iroquois' ELI Project does not. First, Iroquois is currently the only pipeline that provides direct access to Long Island. The proposed Islander East Project will provide Long Island with another source of supply, allowing this market to enjoy the benefits of pipeline-to-pipeline competition for the first time. More importantly, the proposed Islander East project will provide much needed security and reliability by providing a second facility to access supply in the event something happens to either of the pipeline facilities. Iroquois' proposed ELI Project cannot provide similar benefits. Therefore, the proposed projects are not mutually exclusive and do not require that the Commission conduct an *Ashbacker* hearing.

57. Iroquois argues that the fact that the two projects propose different commencement dates should be no consequence for purposes of considering their competitiveness and mutual exclusivity. Other parties raise similar arguments. They contend that because of the potential delays in the construction of the proposed generation facilities and delay created by the Connecticut moratorium, Islander East will not be constructed in time to meet its 2003 in-service date. Therefore, they contend that the Commission should consider the two projects together.

58. KeySpan Delivery Companies has stated that they need the capacity on Islander East to ensure

sufficient supplies to serve the needs of its customers during the winter of 2003-2004. Having found that these projects are not mutually exclusive we see no reason to delay processing Islander East's proposed project for purposes of comparative consideration. Issues concerning the Connecticut moratorium are addressed below.

59. Iroquois and other parties contend that NEPA requires that the Commission analyze reasonable alternatives and that the draft EIS in the Islander East proceeding recognizes that the ELI Project is a potential alternative to Islander East. It contends that the Iroquois alternative has a significant environmental advantage over Islander East in that it reduces the environmental impacts that are certain with the Islander East proposal, while still achieving the objectives of the proposed project.

60. NEPA's requirement that alternatives be analyzed, by itself, does not trigger a comparative hearing. We have fully reviewed Islander East's project and are in the process of reviewing Iroquois' project in compliance with the requirements of NEPA.[30] In this proceeding, the Commission took into account Iroquois' pending proposal and recognized that its existence may affect the balancing required in deciding whether there was sufficient need for both projects. In performing this balancing, the Commission is mindful that the environmental conditions can only minimize, never entirely eliminate, a project's impact. As stated, we have concluded that with appropriate environmental conditions, Islander East's proposed project can be made environmentally

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[30] *See* ELI Extension Project Draft EIS, issued in Docket No. CP02-52-000 on August 23, 2002.

acceptable and that the public interest requires that the Commission approve Islander East's proposal and issue it a certificate to construct and operate its proposed facilities.

61. Finally, Iroquois claims that the Commission has consolidated proceedings where there are similarities and overlap between pipeline proposals.[31] It argues that there are similarities that overlap between the two proposed projects, particularly with respect to environmental matters, and consolidation of common issues would foster administrative efficiency, avoid duplication of effort, and generally serve the public interest. We disagree. A comparative hearing is inherently a time consuming resolution process. Timely development of the necessary pipeline infrastructure and the parties stated need for the facilities for the 2003/2004 heating season are our chief considerations. We believe our approach best serves those purposes, as well as administrative efficiency.

B. *Connecticut Moratorium / Federal Preemption*

62. On April 12, 2002 the Governor of Connecticut issued Executive Order No. 26 that prohibits state agencies from approving any utility projects that cross Long Island Sound, among other things, until January 15, 2003. Similarly, on June 3, 2002, the Connecticut Legislature enacted Public Act No. 02-95 which imposed a one-year moratorium on utility crossings in Long Island Sound. Both actions created a task force to access the environmental impact of such crossings and to determine the present and future energy needs of Connecticut. Many Connecticut

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[31] *Citing* American Natural Rocky Mountain Co., 21 FERC ¶ 61,229 (1982).

local and federal officials, representatives, agencies, and individuals filed requests with the Commission urging that it honor the Connecticut moratorium.

63. In enacting the NGA, Congress placed ultimate authority for determining the location of interstate pipelines with the Commission, "a federal body that can make choices in the interest of energy consumers nationally."[32] While the Commission respects Connecticut's decision to undertake an assessment of its future energy needs and to take seriously its environmental responsibilities regarding Long Island Sound, the Commission is charged with a broader mandate to promote a secure, high quality, and environmentally responsible interstate natural gas pipeline infrastructure to meet the energy needs of the nation as a whole. As discussed above, the initial customers of this project are in Long Island and New York, and they have indicated a need for the proposed service in a time frame that could not be accommodated were the Commission to defer its consideration of the applications before it for the pendency of Connecticut's moratorium.[33]

64. If the Commission does not issue this certificate now, it will abdicate its responsibility to expedite necessary pipeline infrastructure to supply the future market needs of Long Island consumers. While, as several commentors contend, circumstances may develop such that Islander East cannot commence the service proposed on the currently projected

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[32] *See* National Fuel Gas Supply Corp. v. Public Service Comm. of NY, 894 F.2d 571 at 579 (2nd Cir. 1990)

[33] We note that the Commission also received letters from New York officials and representatives urging that the Commission continue to process the Islander East application.

timetable, it is not in the public interest to make that possibility a certainty by failing to move forward in this proceeding in a timely manner.

65. We also note that the NGA and the regulations promulgated by the Commission under that statute generally preempt state and local law. However, the Commission encourages applicants to cooperate with state and local agencies. As demonstrated by the Environmental Conditions determined in the Final EIS and listed in the Appendix to the order, the Commission requires extensive consultation between the pipeline applicant and local agencies, including the Connecticut Department of Environmental Protection and the New York State Department of Environmental Conservation, among others. The state of Connecticut still has a significant rule to play prior to the ultimate completion of this project.

C. *Rehearing and Clarification Issues*

1. *Public Convenience and Necessity/Policy Statement*

a. *Subsidization*

66. On rehearing, the Connecticut Companies argue that the incremental pricing under the Islander East lease with Algonquin is subsidized by Algonquin's existing customers in violation of the Commission's Policy Statement. They contend that Algonquin's C-System is an asset paid for by Algonquin's existing customers. They argue that because the incremental lease payment does not include any payment for the existing C-System facilities, Islander East is not contributing to the costs of the facilities already in place that make the expansion possible. Therefore, the Connecticut Companies conclude that

the expansion project is being subsidized by Algonquin's existing customers.

67. The Connecticut Companies argue that under the Policy Statement, incremental rate treatment does not necessarily avoid subsidies where, as here, the incremental rate is lower than the existing rolled-in rates and the expansion is premised on existing facilities that provide the platform for relatively inexpensive expansion. The Connecticut Companies assert that in deciding that no subsidy exists here, the Commission ignores this fundamental tenet of the Policy Statement and simply assumes that because the construction is "strictly incremental," the pricing should be as well.

68. In response, Algonquin states that the Connecticut Companies' attempt to compare the lease payment and Algonquin's existing system average rate is inappropriate. Algonquin states that under Commission precedent, the Commission evaluates the appropriateness of leases by comparing these payments with the lessor's firm transportation rates for comparable service.[34] Algonquin also contends that the Connecticut Companies' argument that Islander East should be making contributions to the cost of the pre-existing facilities is inconsistent with numerous Commission orders in which the Commission has determined that the incremental rate should be based solely on the cost of the incremental facilities, without any contribution to pre-existing facilities.

69. Generally, the Commission views lease arrangements differently than transportation services

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[34] *Citing* Columbia Gas Transmission Corp., 78 FERC 61,030 at 61,113 (1997).

under rate contracts. Accordingly, the Connecticut Companies' comparison of Algonquin's existing rate to the rate charged under the lease agreement for subsidy purposes is misplaced. The Commission views a lease of interstate pipeline capacity as an acquisition of a property interest that the lessee acquires in the capacity of the lessor's pipeline.[35] To enter into a lease agreement, the lessee generally needs to be a natural gas company under the NGA and needs section 7 certificate authorization to acquire the capacity. Once acquired, in essence, the lessee owns that capacity and the capacity is subject to the lessee's tariff. The leased capacity is allocated for use by the lessee's customers. The lessor, while it may remain the operator of the pipeline system, no longer has any rights to use the leased capacity. Most frequently, leases are used in conjunction with new pipeline facilities to avoid the need to construct additional facilities in new rights-of-way. The Commission encourages pipelines to design their systems using leases to lessen the need to use eminent domain. The Commission's policy is to approve a lease if it finds that: (1) there are benefits for using a lease arrangement; (2) the rate under the lease is less than comparable transportation service; and (3) the lease arrangement does not adversely affect existing customers.[36]

70. In the December 21 order, the Commission determined that the Islander East lease will result in

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[35] Texas Eastern Gas Transmission Corp., 94 FERC ¶ 61,139 at 61,530 (2001).

[36] *See* Columbia Gas Transmission Corporation, 79 FERC ¶ 61,160, at 61,755-59 (1997); Midwestern Gas Transmission Co., 73 FERC ¶ 61,320, at 61,888 (1995); and Mobile Bay Pipeline Projects, 55 FERC ¶ 61,358, at 62,078 (1991).

a lower rate than if Islander East constructed the required facilities. Additionally, as Algonquin points out, the lease payment is less than comparable transportation service. Further, the lease arrangement eliminates the need for Islander East to construct 27 miles of new pipeline, thereby avoiding disruption to the environment. Under the proposed lease agreement, Algonquin's existing customers will continue to pay the same rate and receive the same service that the Commission has determined to be just and reasonable. They will not incur any additional expense because of the lease arrangement. Further, the proposed lease arrangement provides significant benefits by promoting the efficient use of facilities without imposing additional costs, including needless monetary expense and environmental expense of constructing duplicate facilities. Therefore, consistent with Commission policy concerning leases, we reaffirm our finding that the lease is in the public convenience and necessity.

b. *Other Policy Statement Issues*

71. The Connecticut Companies contend that the Commission's benefits and impacts analysis is lacking. They argue that the Commission has found, without explanation, that the Algonquin/Islander East project is desirable because it is well positioned to provide fully integrated access between New York and New England. They contend that there is no basis for this conclusion. They state that Islander East's Long Island-based facilities will not interconnect with other pipelines, and that backhaul opportunities from Long Island north through the Islander East system are non-existent. Further, the Connecticut Companies state that there is no reason

to believe that they will have any use for the capacity created on Algonquin's C-System.

72. The Connecticut AG contends that the Commission should reconsider its decision in the PD because there has not been a determination of need for both projects. It also states that Connecticut's pipeline infrastructure is already "tight." It claims that if the Islander East project and Iroquois' ELI Project use capacity on the existing pipelines in Connecticut for their proposed projects, it would have strategic implications for the security of New England's power supply. The Connecticut AG also asserts that the Islander East project will not result in any appreciable new natural gas infrastructure capacity. He asserts that the project will require Connecticut customers to subsidize a tap from the existing, barely adequate gas supply solely to benefit the corporate owners of the project.

73. Many individuals commenters, including Branford in its rehearing request, raise concerns that since the pipeline will not benefit Connecticut consumers, the benefits of the proposed pipeline project cannot outweigh its adverse impacts. Branford and others also argue that the Commission failed to consider the Iroquois' ELI Project. They argue that Iroquois' project appears to serve the same market and may be preferable to Islander East's project. The argue that the Iroquois project appears to have less impact on landowners and the environment. Therefore, they contend that if a superior competing project renders the Islander East project unnecessary, the adverse economic impacts on landowners outweigh any benefits.

74. Under the NGA, the Commission is required to make decisions concerning the public interests of

energy consumers on a national basis. The proposed Islander East and Algonquin Projects increase the flexibility and reliability of the interstate pipeline grid by offering greater access to gas supply sources with increased availability of gas for anticipated electric generation projects. Further, it will introduce pipeline-to-pipeline competition to Long Island markets. The fact that Algonquin's existing customers and Connecticut residents may not appear to benefit from the proposed projects does not mean that the proposed project's benefits do not outweigh any potential adverse impacts. The Islander East and Algonquin projects will be able to increase the capacity that is available on those pipelines in Connecticut that could potentially serve Connecticut customers when and if potential shippers in Connecticut decide that they need to contract for more capacity. Also, interruptible service could be established at the currently proposed capacity level through the addition of taps in Connecticut.

75. Branford and numerous commentors contend that the Commission failed to weigh the significant harm the proposed projects will have on landowners. Branford contends that the Commission failed to evaluate the significant economic harm to landowners. It cites to the Branford Blue Ribbon Committee report that estimates the proposed Islander East project could result in present value losses of over $861 million in disruption of the town's shellfish beds. It also estimates a $500,000 impact on the town's tourism industry. It also contends that the Commission failed to consider other findings in the report.

76. Generally, the Commission believes that pipelines designed to be placed in existing utility and

transportation rights-of-way have less adverse impacts than new greenfield pipelines that require new rights-of-way. Because approximately 83 percent of the Islander East pipeline, as determined in the final EIS, will be constructed in, or adjacent to, of existing pipeline, powerline, railroad, and road rights-of-way, it will have less of an impact than it would if it were an entirely new greenfield pipeline. Further, Islander East's lease agreement with Algonquin eliminates its need to construct 27 miles of its own pipeline facilities. In response to landowner concerns during the EIS process, Islander East proposed, and the Commission has approved, numerous variations in its proposed route in response to landowner concerns. Also, as discussed below, Islander East has negotiated crossing/settlement agreements with all the leaseholders of the shellfish leases directly impacted by the construction of its pipeline in Long Island Sound.

77. As stated, Branford contends that the Commission did not address the findings of its Blue Ribbon Report. First, we note that Branford's Blue Ribbon Report contained mostly environmental issues that are discussed in the final EIS. In its rehearing request, Branford states that the Commission ignored the findings that irreversible damage to the leased shellfish beds could amount to $8.7 million annually. We find Branford's anticipated damages are overstated. First, it assumes that all the leases will be permanently and totally damaged. As discussed below and in the final EIS, the Commission believes that the proposed mitigation measures would minimize the potential adverse impacts. Additionally, we note that Islander East is responsible for potential damages that are a direct result of the construction of its pipeline.

78. We also believe that Branford's estimated impact of $500,000 on the town's tourist industry is also overstated. Branford believes that the proposed Islander East Project threatens and will totally reduce the attraction of the Stony Creek area. Generally, the impact of the construction of any specific area should last for less that a month.[37] When crossing a road, Islander East will bore under the road so as not the disrupt traffic within the town. Further, once constructed, there will be no residual construction or visual impacts that would impact the town's tourism.

79. On rehearing, Branford also claims that the Commission did not quantify the costs and benefits. Therefore, it states that there could be no economic balancing test and no reasoned conclusion that the project is in the public interest. The Commission's public interest balancing of impact and benefits is not a quantitative analysis. Generally, the Commission's statutory obligation to weigh and balance factors for its public interest consideration cannot be done with the mathematical precision that Branford demands. Nevertheless, the Commission has identified the benefits and burdens of the project as they affect the public interest and explained the reasons underlying its decision.

80. Therefore, under the Policy Statement, the Commission finds that Islander East has sufficiently minimized the impact the proposed project will have on landowners. As discussed below, based on the findings in the final EIS, we believe that the adverse environmental impacts created by the project can be adequately mitigated so that the benefits of increased

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[37] Final EIA at 3-167.

flexibility and reliability of the interstate pipeline grid and the introduction of pipeline-to-pipeline competition to Long Island markets will outweigh the adverse impacts.

2. *Algonquin Operating Pressure*

81. In the December 21 order, the Commission determined that the delivery pressures at Algonquin's Guilford and North Haven delivery points for the Connecticut Companies will decrease to 331 psig and 387 psig, respectively. On rehearing, the Connecticut Companies state that historically pressures at the North Haven delivery point have been in the range of 400 psig. They contend that Algonquin originally informed the Connecticut Companies that the pressures at the North Haven delivery point would increase to 665 psig as a result of the construction of the proposed facilities. However, Algonquin's actual filing reflects a pressure at the North Haven Gate Station of 387 psig. On rehearing, the Connecticut Companies request that the Commission: (1) clarify on the record how Algonquin's original prediction of the North Haven Gate Station pressure of 665 psig declined by more than 70 percent to 387 psig in the filed application;[38] and (2) how Algonquin's estimate of 387 psig is credible.

82. In its review of Algonquins proposed project, the Commission analyzed the pressures on Algonquin's systems that would result from the construc-

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[38] We note that in its amended rehearing request, the Connecticut Companies added a footnote that states that Algonquin representatives met with Southern Connecticut after the application was filed and explained that originally predicted pressure level at the North Gate Station dropped because of changes in assumptions it made about the project.

tion of the proposed facilities. This analysis determined that once the facilities are constructed, the delivery pressure at the North Haven delivery point would be 387 psig. As noted in the December 21 order, Algonquin's contractual obligation for the North Haven delivery point is 199 psig. Therefore, the reducted pressure is still substantially above Algonquin's contractual obligation and provides an acceptable level of pressure for the Connecticut Companies. The Connecticut Companies have not presented any new evidence that would warrant a change in the Commission's finding in the December 21 order. The question of why Algonquin's pre-application prediction of the resulting pressures was different from the pressure represented in its filed application is irrelevant.

83. In his filed comments, Paul Haung also contends that the changes in pressures that will result from the construction of the Algonquin and Islander East projects will decrease the amount of gas that is available to Connecticut consumers. We disagree. As stated in the December 21 order, the Commission has reviewed the design capacity of Algonquin's project and has concluded that the facilities are properly designed to provide the 260,000 Dth per day of additional firm capacity required under the Lease Agreement. Because the proposed facilities are designed to provide the increased capacity required, Algonquin's existing capacity and its current service to its existing customers will not be impacted.

3. *Algonquin's Rehearing Request*

a. *Depreciation Rate*

84. In the December 21 order, the Commission required that Algonquin fully amortize the cost of the

incremental facilities to provide the service for Islander East under the lease to the 20-year term of the lease to ensure that Algonquin's existing customers are protected from any adverse rate impact at the conclusion of the Lease Agreement. On rehearing, Algonquin states that in approving previous expansion of the Algonquin system the Commission has approved the application of the systemwide depreciation rate for incremental facilities.[39]

85. Algonquin states that there is nothing in the record in this proceeding to support a conclusion that the incremental facilities that are being created to supply the proposed capacity under the Islander East lease will not be used beyond the term of the lease. It states that the capacity is mainline-type flow rather than a single proposed lateral. Algonquin contends that it has every expectation that additional customers and additional load will be added to the Long Island and Connecticut markets sufficient to support the lease capacity past the 20-year term. However, it states that its existing customers will be protected because the lease capacity is incrementally priced and that its existing customers will not bear any expansion costs unless a future Commission determines that they should. Further, Algonquin contends that if the depreciation rate was dependent upon the term of the lease, Islander East would be subsidizing

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[39] *Citing* Maritimes & Northeast Pipeline, L.L.C. and Algonquin Gas Transmission Co., 95 FERC ¶ 61,077 (2001); Algonquin Gas Transmission Co., 97 FERC ¶ 62,152 (2001); Algonquin Gas Transmission Co., 84 FERC ¶ 61,174 (1998); Texas Eastern Transmission Corp., 62 FERC ¶ 61,019 (1993); Tennessee Gas Pipeline Co. (Tennessee), 52 FERC ¶ 61,257 (1990); ANR Pipeline Co., 51 FERC ¶ 61,359 (1990); and Texas Eastern Tranmission Corp., 47 FERC ¶ 61,341 (1989).

the use of the facility by future customers. It states that the lease was not designed to recover such an artificially high depreciation rate.

86. Upon reconsideration, we will grant rehearing on this issue and allow Algonquin to use its systemwide depreciation rate. This depreciation rate is consistent with the depreciation treatment the Commission has approved in other recent Algonquin expansion projects.[40] Although this depreciation rate does not match the shorter term of the proposed lease agreements, because the lease agreement is a property interest, Algonquin will need to file for NGA section 7 certificate authorization upon expiration of the lease agreement and before it can use the facility to provide any subsequent service. In that proceeding, the Commission can determine, based on Algonquin's proposed future use of the incremental capacity, the appropriate treatment of the future of the depreciation rate. However, we note that Algonquin will be financially liable for project costs and will not be able to shift any such costs to existing shippers if the proposed future use of the facilities is not fully subscribed when the lease agreement terminates.[41]

b. *Similarly Situated Shippers*

87. In the December 21 order, the Commission required that Algonquin offer the same type of service it is providing Islander East under the Lease Agreement to others that request a similar arrangement.[42] On rehearing, Algonquin requests that the

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[40] *Id.*

[41] *Id.*, *see also* Transcontinental Gas Pipe Line Corp., 97 FERC ¶ 61,094 at 61,486 (2001).

[42] We note that in the December 21 order we required that Algonquin provide similar arrangements to similarly situated

Commission clarify that its obligation to offer similar terms to similar situated parties does not obligate Algonquin to offer lease terms that do not recover Algonquin's cost of service.

88. Algonquin contends that the Commission misunderstood the lease payment when it found that the lease payment was not designed to recover return on the capital cost of the proposed facilities, or that the lease payment does not recover income taxes. Algonquin claims that the lease payment was intended to recover all costs associated with the lease. It asserts that the lease payment "essentially" recovers Algonquin's cost of service over the 20-year lease term, including return on equity, debt cost, and federal and state income taxes.

89. The requirement that Algonquin provide similar arrangements to similarly situated shippers, in essence, does not necessarily require that Algonquin make such service available to "shippers". As stated, the lease arrangement is a property interest that requires NGA section 7 certificate authorization. As such, this type of arrangement is only available to a natural gas company under the NGA. While Algonquin contends that the lease payment essentially recovers its cost of service, based on information submitted by Algonquin, the first year levelized cost of service is $4,854,724, while the annual lease

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shippers, in essence, this does not necessarily require that Algonquin make such service available to "shippers". As stated, the lease arrangement is a property interest that requires NGA section 7 certificate authorization. As such, this type or arrangement is only available to a natural gas company under the NGA.

payment is $4,785,150.[43] It is this type of financial arrangement that Algonquin must provide another similarly situated party. However, Algonquin will bear financially liable for any project costs not covered by this type of lease and will not be permitted to shift any such costs to other customers.

c. *Service on Leased Facilities*

90. In the December 21 order, the Commission pointed out that at the expiration of the lease, Alqonquin would need certificate authorization to use the capacity created by the proposed incremental facilities. On rehearing, Algonquin requests that the Commission clarify that Algonquin does not need certificate authorization to use the proposed facilities to provide open access service under its blanket certificate. Algonquin contends that, once constructed, the facilities will become an integrated part of Algonquin's system and that it should be able to make available to its Part 284 customers any of the additional capacity that is not being used by Islander East.

91. As stated, a lease of interstate pipeline capacity is an acquisition of a property interest that the lessee acquires in the capacity of the lessor's pipeline. As such, the lessee of interstate pipeline capacity is required to obtain appropriate NGA section 7(c) authorization to acquire the lease capacity. Once certificated, the capacity, in essence, belongs to the lessee. As such, any available capacity is subject to the capacity release requirements of the lessee's tariff. The lessor has relinquished its rights to use

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[43] Based on the figures in Attachment A, Algonquin essentially fails to recover approximately $1,390,000 over the 20-year term of the lease.

that capacity. Algonquin does not have any rights to use the leased capacity for interruptible service. In this proceeding, the authorization the Commission is issuing to Algonquin grants it authorization only to construct and operate the incremental facilities. It does not have certificate authorization to use that capacity to provide service, however, because the capacity will be leased to Islander East.[44] If Islander East chooses to release capacity, Algonquin would have to compete with all the other potential shippers bidding for that capacity under the provisions of Islander East's tariff. Algonquin can receive no preferential treatment in the acquisition of such capacity.

92. As stated in the December 21 order, because Islander East holds a certificate to acquire the capacity by lease, when Islander East discontinues its use of the capacity, it will need to file for a certificate to abandon the capacity and Algonquin will need to apply for a certificate to reacquire the capacity.

d. *Records for Cost and Revenue*

93. In the December 21 order, the Commission required that Algonquin include a provision in its tariff that would require that Algonquin maintain separate records for all the costs and revenues related to the Islander East lease. On rehearing, Algonquin contends that the tariff provision is not

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[44] Similarly, when the Commission authorizes a lease agreement based on a pipeline's existing capacity, the Commission requires that the lessor pipeline abandon that capacity and issues a certificate to the lessee pipeline to acquire that capacity. Once acquired, the lessor pipeline no longer has an interest in that capacity and can not use it to provide service on its system.

necessary and would impose unnecessary administrative burdens on Algonquin. It states that Algonquin's customers are protected from the cost of the lease by the fact that the lease service is priced incrementally. It argues that the customers' revenue responsibilities could only be affected by a rate proceeding subsequent to the in-service date of the proposed facilities. Algonquin states that since its current rates are subject to a moratorium and because no rate proceeding is imminent, the tariff provision would not provide any meaningful information.

94. Algonquin contends that its customers' interests would be more directly protected by a condition requiring that its accounting records segregate the cost of the proposed facilities. Algonquin states that it maintains separate records for the costs of its incrementally-priced expansion facilities. It claims that the leasehold transaction presents no special issues of cost segregation different from those presented by the typical incrementally priced expansion. Algonquin states that in any future rate proceeding the accounting data will be available on the basis of which the costs of service of the proposed facilities can be segregated from the cost of service used to derive Algonquin's rates.

95. The Commission's intent behind requiring the tariff provision was to assure that Algonquin maintain separate records for all the costs and revenues related to the Islander East lease. That purpose can be accomplished by Algonquin's keeping accounting records of the separate costs. Accordingly, we will grant rehearing on this issue and revise our ruling in the December 21 order by requiring that Algonquin maintain separate and identifiable accounts for volumes transported, billing determinates, rate compon-

ents, surcharges, and revenues associated with its negotiated rates. This information must be in sufficient detail so that the data can be identified in Statements G, I, and J in any future NGA section 4 or 5 rate cases.

D. *Environmental Review*

96. On August 21, 2002, the Commission issued the Islander East Pipeline Project final EIS. The EPA published a notice of availability of the EIS in the *Federal Register* on August 30, 2002. Approximately 1500 copies of the EIS or Executive Summary were mailed to agencies, groups, and individuals on the mailing list. The EIS included a summary of all comments received on the draft EIS and responses to those comments. Based on information provided by Islander East and Algonquin and further developed by field investigations, literature research, alternative and route variation analyses, and contacts with Federal, state, and local agencies and individual members of the public, the EIS concludes that construction and operation of the proposed project will result in a limited adverse environmental impact. The EIS further concludes that if the project is constructed and operated as proposed by Islander East and Algonquin and in accordance with the recommended mitigation measures, it would be an environmentally acceptable action.

97. The final EIS evaluates alternatives to the proposed Islander East Project to determine whether they would be reasonable and environmentally preferable to the proposed action. The final EIS found that the ELI System Alternative, an alternative based on a modified version of Iroquois' ELI Project, was environmentally preferable because it has a shorter Long Island Sound crossing, avoids more

shellfish leases, and would only have air quality and noise impacts onshore in Connecticut.[45]

98. Several parties and commentors urge the Commission to choose Iroquois' ELI Project over the Islander East Project if it determines the ELI Project is environmentally preferable. The policy and goals of NEPA, however, are supplementary to the Commission's mandate under the NGA. The Commission's primary obligation under the NGA remains the same. NEPA simply adds a secondary responsibility that mandates that the Commission consider the environment in carrying out is statutorily mandated duties.[46] Further,

> NEPA itself does not mandate particular results, but simply prescribes the necessary process. If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs. . . . All that is required is that the agency "identify the reasonable alternatives to the contemplated action" and "look hard at the environmental effects of [its] decision."[47]

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[45] The ELI System Alternative includes the proposed ELI Project facilities, including the Milford Compressor Station, the route for Long Island Sound and the onshore portions in New York. The ELI System Alternative would also include an additional 10,000 hp to Iroquois' Brookfield Compressor Station and 5.6 miles of pipeline lateral equivalent to the Calverton Lateral proposed by Islander East.

[46] See State of Louisiana v. FPC, 503 F.2d 844 at 876 (1974).

[47] Midcoast Interstate Transmission v. FERC, 198 F.3d 960 at 967 (2000), *citing*, Robertson v. Methow Valley Citizens Council, 490 U.S. 332 at 350 (1989) and Corridor H Alternatives, Inc. v. Slater, 166 F.3d 368 at 374 (D.C. Cir. 1999).

99. Islander East's application demonstrates that its proposed project will provide much needed competition and reliability that the ELI System Alternative and Iroquois' ELI Project cannot. As stated, the New York PSC prefers the Islander East Project because it will provide another source of delivery to Long Island. Moreover, the final EIS determines that Islander East's proposed project is an environmentally acceptable action. Therefore, we find that the public convenience and necessity requires that we approve Islander East's project.

100. Branford Land Trust contends that the Islander East pipeline is not needed to increase reliability of the pipeline infrastructure in eastern Long Island. Specifically, it argues that the system interconnects with the three pipeline companies in Connecticut[48] that could serve Long Island and make it unnecessary to construct the Islander East Pipeline. It asserts that damage to any of these three pipelines could be circumvented by routing the gas through the other two companies' lines. Branford Land Trust states that the only location where damage could disrupt gas transportation to Long Island by Iroquois' pipeline is the short distance between the Sheldon, Connecticut interconnection and where Iroquois' ELI Project branches from the existing Iroquois pipeline.

101. As stated, the eastern Long Island market is currently directly served by only one pipeline, Iroquois. First and foremost, any disruption in service from Iroquois' facilities in Connecticut and Long Island will have a major impact on the ability to

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[48] Specifically, it refers to Iroquois, Algonquin, and Tennessee Gas Pipeline Co.

continue certain natural gas and electric service in Long Island. Second, it would be difficult to determine what, if any, impact a disruption on Iroquois' system upstream of its Connecticut facilities will have on supplies intended to be delivered to Long Island. Rerouting capacity from other pipelines would be dependent upon available capacity on interconnecting pipelines and the feasibility of being able to get that capacity for use on Iroquois' system. Moreover, getting the rerouted capacity to Long Island would also depend on Iroquois' shippers ability to contract for that capacity and to find other sources to replace the gas that was lost. The Islander East Project will provide a readily available alternative and additional source of gas for Long Island consumers. Therefore, we find that the Islander East pipeline, in addition to the existing Iroquois pipeline, is necessary to provide the Long Island market with alternatives in the event something happens to either pipeline.

102. Branford Land Trust also contends that the final EIS improperly dismissed consideration of the Cross Bay Pipeline Company (Cross Bay) Project as an alternative to Islander East. It argues that in that proceeding the Commission determined that the Cross Bay Project could be constructed with minimal environmental impacts because it would upgrade an existing pipeline between New Jersey and Long Island. Branford Land Trust claims that the fact that Cross Bay decided not to build the facility should not eliminate it from consideration.

103. In *Cross Bay*,[49] the Commission authorized the company to construct and upgrade facilities that

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[49] Cross Bay Pipeline Co., 97 FERC ¶ 61,165 (2001), *order vacating certificate*, 98 FERC ¶ 61,080 (2002).

would provide an additional 125,000 Dth per day of capacity to serve markets in New York City and Long Island. After the Commission issued the certificate, Cross Bay requested that the Commission vacate its certificate authorization. In a letter filed on December 7, 2001 in Docket No. CP00-412-000, Cross Bay stated that the tariff and rate provisions imposed in the order would carry long-term economic uncertainty on one of its members. Further, it explained that the market targeted by the Cross Bay Project did not materialize in the time frame anticipated.

104. As noted in the final EIS, the planned capacity of the Cross Bay Project was about half of the volume proposed by Islander East and would need to be redesigned to be able to deliver the increased volumes.[50] Such a redesign would probably required more looping of the existing facility which would probably significantly change the impact of the proposed project. The final EIS determined that the Cross Bay Project was not a reasonable alternative because of the differences in proposed volumes and because the project was withdrawn. Even assuming, for argument sake, the Islander East market could replace the market targeted by the Cross Bay Project, the project was also withdrawn because the project sponsors were not willing to accept the tariff and rate conditions imposed upon the certificate authorization. We agree with the finding in the final EIS that the Cross Bay project is not a reasonable alternative that would warrant any further consideration.

105. The Commission has reviewed the information and analysis contained in the EIS regarding the potential environmental effect of the project. Based

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[50] See final EIS at 4-7.

on our consideration of this information, we agree with the conclusions presented in the EIS and find that the Islander East Pipeline project, if constructed and operated in accordance with the recommended and proposed environmental mitigation measures, is environmentally acceptable. Therefore, we are including the environmental mitigation measures recommended in the final EIS as conditions to the authorizations issued to Islander East and Algonquin.[51]

106. Many parties, towns, agencies, and individuals filed comments and recommendations concerning the environmental impact of Islander East's proposed project. The final EIS discusses these comments. Below is a brief discussion of the major areas of concern.

107. Some commenters raised concerns about, among others things, worse-case scenarios involving earthquakes or potential run-away train derailments. Under NEPA, the Commission is required to prepare a detailed statement on the environmental impact of a proposed federal project.[52] However, NEPA does not require that all impacts be discussed in exhaustive detail. Only effects that are likely, foreseeable, or reasonable foreseeable need be discussed. The terms likely and foreseeable apply to a type of environmental impact that is likely to occur that a person of ordinary prudence would take it into account in reaching a decision.[53] The final EIS analyzes the

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[51] The Appendix to this order lists the Environmental Conditions imposed on Islander East's certificate authorization.

[52] *See* 42 U.S.C. § 4332(2)(C)(i).

[53] *See* Sierra Club v. John O. Marsh Jr., 976 F.2d 763 at 767 (1992).

potential foreseeable impact of the proposed project. It does not address scenarios that are highly speculative and indefinite.[54]

1. *Impact on Long Island Sound and Commercial Fishing*

108. Islander East's proposed project will cross approximately 22.6 miles of Long Island Sound from the Connecticut to the Long Island Shorelines. In its original application, Islander East stated that it may use the jetting construction method in lieu of the subsea plow method, if a plow was not available. The jetting technique causes greater disturbance to sediments and also disperses sediments over a much larger volume of the water column than the subsea plow. However, subsequently, Islander East has committed to using the subsea plow method in the areas in Long Island Sound that it will not cross by horizontal directional drill (HDD). Islander East has committed to use HDD for the portions of the pipeline that run from the Connecticut shoreline into Long Island Sound and from Long Island Sound on to the shore in Long Island. HDD will minimize impacts to the shoreline and to the shell fish lease areas off of the Connecticut shore. The use of these two methods will significantly decrease the impact the proposed pipeline will have on Long Island Sound.

109. Islander East also conducted computer modeling of spoil mound erosion. The modeling was to determine the short- and long-term stability and the impact of a storm on the dredged material mounds created during the construction of the proposed pipeline if they are exposed. The final EIS reviewed the assumptions and inputs used for the model and

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[54] *See* Kleppe v. Sierra Club, 427 U.S. 390, 402 (1976).

have determined that they are appropriate. Additionally, the final EIS determined that the modeling effort adequately addresses the impacts to the sediment mounds from storm events.

110. On August 13, 2002, the Branford Land Trust filed a letter stating that Islander East's offshore sediment dispersion modeling is fragmented and limited and gives a dangerously incomplete picture of the likely consequences of Islander East's project. It questions the adequacy of the tidal vector, current directions, and sensitivity of the model. The Branford Land Trust also claims, among other things, that large amounts of sediment would be eroded onto near-shore shellfish beds during construction, and that the modeling fails to provide dimensions of plumes and conditions that may occur during a major storm event, particularly in the near-shore areas where the shellfish leases are found.

111. As discussed in the final EIS, Islander East's modeling included site-specific current and wave data that captured a storm event whose magnitude is considered to be representative of an event with a recurrence interval of approximately 2 to 2.5 months.[55] The modeling included two typical northeasters. We agree with the conclusion of the final EIS that the modeling effort adequately addresses the impacts to the sediment mounds from a likely foreseeable storm event as required by NEPA.[56]

112. The Commission agrees, however, that the construction of the pipeline may impact near-shore areas if a non-typical storm event were to occur

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[55] *See* final EIS at 3-51.

[56] *See supra* n. 49.

during construction. As discussed in the final EIS, sedimentation may cause mortality to oysters. A non-typical storm could result in greater sedimentation on near-shore areas that could impact the number of oysters that could be killed.[57] Any damages caused by the construction of the project are the responsibility of the pipeline company, regardless of whether the impacts were anticipated through modeling or occurred due to unexpected conditions. Therefore, we will require that Islander East determine additional near-shore areas that will need to be monitored to determine any damage that may result from additional sedimentation impacts.

113. In order to more adequately determine the near-shore area that should be monitored for potential sedimentation impacts from construction, we will add the following environmental conditions. First, in a new Environmental Condition No. 54, we will require that Islander East run the offshore sedimentation model on the shallower sections of the spoil mounds (at the northern portion of the HDD transition basin), prior to submitting the offshore monitoring plan, in order to determine additional near-shore areas that may require monitoring for sedimentation impacts. Islander East should file the results of the revised modeling along with the offshore monitoring plan required in Environmental Condition No. 23.

114. Second, in a new Environmental Condition No. 55, we will require that if monitoring results

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[57] We note, however, that because clams are vertically mobile in sediments and are not killed by smothering, underestimates from the model would have no consequence on the discussion of impacts to clams that were described in the final EIS. *See* final EIS at 3-70.

show that the erosion and deposition exceed either the depth of sediment deposition or the areal extent of coverage that was estimated by Islander East's modeling, Islander East will be responsible for mitigation of the additional effects. Such mitigation could include clam and oyster seeding or replacement of oyster habitat, sufficient or compensate for the unpredicted impacts. Mitigation should be determined through consultation with the lease holder and/or appropriate Federal or state agency.

115. Commercial fishing, including shellfishing, is an import industry off the Connecticut shoreline. The proposed Islander East Project will cross seven shellfish lease areas. Of these, two are unlisted shellfish beds, and four would be avoided by using HDD crossing methods at the Connecticut shore. One shellfish lease area would be directly disturbed by trench excavation and 25 shellfish lease areas are located within 0.25 mile of the pipeline route and may be subject to potential sedimentation impacts resulting from construction. Three of these adjacent shellfish lease areas would not be crossed by the pipeline, but are located within the anchor corridor associated with the construction barges.

116. Islander East has negotiated a crossing/settlement agreement with the leaseholder of the lease directly impacted by the trench excavation at the exit hole of the HDD. It has also executed agreements with the three leaseholders whose leases are located within the anchor corridor. The agreements, among other things, specify payments for: (1) pre-construction harvesting of shellfish within the affected areas; (2) coordination of shellfish harvesting activities in the anchor corridor area during pipeline construction; (3) damages during and immediately following con-

struction; and (4) reseeding the beds with seed shellfish following construction (if desired by the leaseholder).

117. The final EIS also lists other mitigation measures Islander East will implement to minimize the impact of the project on the commercial fishing operations, including, but not limited to, establishing funds to reimburse lobstermen for lost fishing gear.[58] Additionally, to avoid or minimize impacts on commercial fishing, Islander East intends to construct the offshore pipeline during winter months and to adhere to specific construction timing restrictions established by state and Federal authorities to minimize the impact to the commercial fishery operations. The Commission believes that these measures would effectively reduce and minimize impacts on commercial fishing activities to an acceptable level.

2. *Impact on Land Trust Properties and the Central Pine Barrens*

118. The proposed Islander East Project will cross or be located near several special land use areas, including a school yard and several public land trust properties, including the Branford Land Trust property and the Central Pine Barrens of New York. The final EIS discusses numerous alternatives and variations that were analyzed and, when appropriate, adopted to minimize the impact on these areas.[59] Further, the Environmental Conditions discussed in the final EIS and attached in the Appendix to this order require that Islander East continue to consult with the North Haven Land Trust, the Branford

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[58] *See* final EIS at 3-106.

[59] Final EIS Section 4.

Land Trust, and the Central Pine Barrens Commission concerning mitigation measures and revised construction and restoration plans before commencing construction of the facilities. Islander East is required to file any revisions with the Director of the Office of Energy Projects (OEP) for review and written approval before it may commence construction of the subject facilities.

119. The final EIS recommends a route alternative to Islander East's proposed Calverton Lateral Route that will require that the pipeline cross an additional 16 acres of the Central Pine Barrens' Core Preservation Area (CPA) (Calverton State Route 25 Alternative).[60] The Commission has adopted this alternative because it will reduce the number of residences within 50 feet of the proposed pipeline. Additionally, the alternative route will parallel an existing state highway.

120. In comments filed in response to the final EIS, the Pine Barrens Society states that Islander East's proposed Calverton Lateral Route would be preferable to the Calverton State Route 25 Alternative because less CPA of the Central Pine Barrens would be crossed with the originally proposed route. It states the draft EIS dismissed the Calverton State Route 25 Alternative and recommended Islander East's proposed Calverton Lateral Route as the more environmentally sensible choice. The Pine Barrens Society contends that the Commission needs to further elaborate the reasons behind the change in position from the draft EIS to the final EIS because

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[60] The 102,500 acre Central Pine Barrens was established in 1993 as a forest preservation area and contains the largest remnant of forest on Long Island.

the circumstances have not changed. Further, it asserts that the Calverton State Route 25 Alternative would include wetlands and locations with New York State Department of Environmental Conservation (NYSDEC) confirmed state listed endangered species and require additional tap valves, aboveground facilities and access roads in the CPA.

121. Based on the information available at the time the draft EIS was issued, there was one existing residence within 50 feet of the proposed Calverton Lateral Route and two within 50 feet of the Calverton State Route 25 Alternative.[61] However, because of subsequent subdivision development, aerial photographs submitted by Meadowcrest developer on June 28, 2002, indicated that there are now eleven residences within 50 feet of the proposed Calverton Lateral Route.[62] Further, in a response to the Pine Barrens Society's comments, Meadowcrest states that there are now 15 completed homes and another 36 that will be constructed by the close of 2002. In light of these changed circumstances, the final EIS determined that the Calverton State Route 25 Alternative would be the preferred route. As stated in the final EIS, the alternative was identified to minimize the length of the lateral, maximize the use of existing rights-of-way, and minimize impacts to new residential areas.[63] The Commission prefers pipeline routing along existing road or utility rights-of-way, whenever possible, over creating a new greenfield pipeline right-of-way, especially through residential areas.

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[61] During an October 16, 2001 Commission Staff field visit the area was an open field.

[62] The final EIS also notes that there are an additional eight planned residence in the Spring Meadow subdivision.

[63] Final EIS at 4-26 - 4-29.

122. The Calverton State Route 25 Alternative does not cross any identified National Wetland Inventory mapped wetlands, and the area of species habitat along the alternative would be avoided by the use of an HDD crossing of Horn Pond and the surrounding area. While a tap valve and access road would be required in the CPA, by routing the lateral along State Route 25, the permanent right-of-way would abut the road right-of-way and avoid further fragmentation of the CPA. This would avoid the unfragmented areas identified by the Pine Barrens Society as being located north and south of State Route 25, since activities would be limited to a 60-foot-wide corridor adjacent to the road. Accordingly, we agree with the conclusions in the final EIS concerning the Calverton State Route 25 Alternative.

123. Since both Iroquois' ELI Project and Islander East's proposed project use the same route on Long Island, the Pine Barrens Society request that the Commission review the feasibility of Islander East and Iroquois operating a jointly owned single pipeline once it hits the mainland in Long Island. The draft EIS for the ELI Project and the final EIS for Islander East discuss the impact of constructing a single 12-mile pipeline instead of duel pipelines. While the two EISs state that a one pipeline alternative on Long Island Sound would have some environmental benefits, the proposed and recommended mitigation measures would significantly reduce the impact of the two pipelines.[64]

124. A one pipeline alternative requires extensive cooperation between the parties and a willingness of

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[64] ELI Project Draft EIS at 4-19 and Islander East Project final EIS at 4-11.

the parties to enter into a coordinated business arrangement. To date, neither party has indicated any willingness to enter into negotiations to attempt to coordinate a workable arrangement to construct a one-pipeline alternative. However, should both projects receive final certificates,[65] the project sponsors might find it beneficial to coordinate their efforts concerning the proposed pipelines located onshore on Long Island.[66] For example, the pipelines might want to consider a lease arrangement involving a single pipe, as such arrangements have the potential to reduce the cost of a project because of the reduced amount of construction involved. Accordingly, we encourage Islander East and Iroquois to explore potential mutually beneficial arrangements that could minimize the potential impact on the Long Island Pine Barrens.

3. *Residential and Commercial Areas*

125. As approved, approximately 83 percent of the proposed pipeline either overlaps or is adjacent to existing pipeline, powerline, railroad, and road rights-of-way. However, there are 41 existing residences within 50 feet of the construction work areas, primarily in Connecticut. Approximately 20 of these

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[65] According to Islander East's proposed construction schedule, it does not intend to commence construction onshore on Long Island until May 2003.

[66] After an initial protest by ANR Pipeline Company (ANR) against Guardian Pipeline Company's (Guardian) proposed pipeline in Illinois and Wisconsin, ANR agreed to lease facilities to Guardian that would interconnect ANR's facilities with the proposed Guardian pipeline and replace 0.17 mile of pipeline with 0.8 mile of pipeline would disturb 10 acres less of primarily agricultural land. *See* Guardian Pipeline Co., 99 FERC ¶ 61,201 (2002).

residences are located within 25 feet of the construction work areas, including four residences within or adjacent to the proposed work area. In addition, 15 existing commercial/industrial buildings are located within 50 feet of the construction work areas. Twelve of these are within 25 feet of the construction work areas, including seven buildings within or adjacent to the proposed work areas. The pipeline would cross two planned commercial developments and the Calverton Lateral would cross one planned residential development, where 11 residences could potentially be built within 50 feet of the pipeline construction work areas before commencement of project construction.

126. During the EIS process, Islander East made several minor route modifications to address, among other things, landowner concerns. We note that during the easement negotiation process, Islander East had the flexibility to work with the affected landowners and make minor changes, subject to subsequent approval, to site the pipeline in a more agreeable area on that landowner's property.

127. Islander East proposes to reduce the temporary construction impacts to residential and commercial areas by avoiding removal of trees and landscaping as much as possible; developing site-specific construction plans for residences within 25 feet of the work area; restoring all lawns and landscaping promptly after backfilling; fencing the edge of the construction area in residential areas; controlling construction-related dust; coordinating road closures with nearby businesses and law enforcement agencies; attempting to complete pipeline installation across closed roads within 24 hours; establishing temporary bridges or other by-passes on

small roads and driveways; and, keeping the roads clean of mud and soil from construction equipment and vehicles.

128. To further address and resolve potential landowner concerns, as discussed in the final EIS, we will require that Islander East establish a landowner complaint resolution procedure and report all landowner complaints in its biweekly progress report to the Commission. Additionally, we will require that Islander East provide each landowner with clear and simple directions for identifying and resolving their environmental mitigation problems or concerns.

4. *Other Final EIS Comments*

a. *Cultural Resources*

129. Several parties and individuals filed comments to the final EIS.[67] The Town of North Branford (North Branford) states that specific conclusions in the final EIS as it pertains to the proposed pipeline in North Branford is flawed and the Commission should not issue a certificate to Islander East until it has completed its "due diligence" in the proposed pipeline route. First, it contends that further investigation is needed to determine the impact of the project on cultural resources in North Branford. It states that it appears that Islander East skewed its investigation by testing areas that inaccurately extrapolate that there is no cultural or historical significance. North Bradford questions how the route of the pipeline can be changed if additional testing finds items of cultural, historical, or archeological significance.

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[67] This order only addresses comments filed on or before September 13, 2002.

130. Section 106 of the National Historic Preservation Act (NHPA) does not require that the Commission delay issuing a certificate until the required investigation and report is completed.[68] Environmental Condition No. 43 requires that Islander East complete its cultural resource investigation and report. Under this condition, Islander East cannot commence construction of the proposed pipeline until: (1) the section 106 investigation and report are complete; (2) the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) have commented on Islander East's report; and (3) those comments have been filed with the Commission for review by the Director of OEP. If North Branford believes that Islander East's investigation is improper it should bring its allegations to the attention of the Connecticut SHPO for further investigation.

b. *Bedrock Testing*

131. North Branford also contend that Islander East has not consulted with the pertinent staff of the Connecticut Department of Environmental Protection with regard to bedrock testing in areas of known land contamination in North Branford. Environmental

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[68] *See* City of Grapevine, Texas v. DOT, 17 F.3d 1502 (D.C. Cir. 1994). In that case, the Federal Aviation Administration (FAA) approved a proposed runway before completion of the review process required by the National Historic Preservation Act (NHPA). To ensure compliance with the NHPA, the FAA conditioned its approval of the runway upon completion of the NHPA review. The court rejected a challenge to the validity of this approach, concluding that "because the FAA's approval of the West Runway was expressly conditioned upon completion of the § 106 process, we find here no violation of the NHPA." *Id.* at 1509.

Condition No. 14 requires that Islander East, in consultation with the Connecticut Department of Environmental Protection, conduct a site-specific study to determine if construction activities, particularly blasting, would effect contaminated groundwater migration in North Branford. Islander East has to file documentation of its consultations, the work plan, and results of the study prior to constructing the proposed facilities.

c. *Branford Steam Railroad*

132. In comments filed in response to the final EIS, Jerry C. Shaw states that the Unexpected Contamination Encounter Plan (Contamination Plan) prepared by Islander East would fail to identify the type of contamination related to railroad operations on the Branford Steam Railroad and that soil testing should be required in this area. Specifically, he contends that Islander East's visual inspection of the area may not be sufficient to detect the presence of polyaromatic hydrocarbons (PAHs) that are prevalent along utility rights-of-way and railroad lines. In addition, he recommends that procedures should be developed for construction adjacent to the railroad and that effective erosion control has not been identified.

133. As discussed in the final EIS,[69] due to access difficulties Islander East has not yet conducted all the required surveys for this portion of the proposed route. Therefore, Environmental Condition No. 38 requires that Islander East develop and file a site-specific plan for this area for approval by the Director of OEP prior to construction of the facilities. As also

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[69] See final EIS at 3-135 to 3-136, and Appendix M, comment letter G65.

noted in the final EIS, the Commission is aware of the potential for encountering contaminated soil in the area of the Branford Steam Railroad.[70] We believe the Contamination Plan and the Erosion Control Plan are sufficient to address any potential impacts should PAHs be detected.

d. *Certificate Conditions*

134. In its comments to the final EIS, Islander East raises two concerns related to two of the proposed Environmental Conditions. First, it states that Environmental Condition No. 11 implies that the AES Calverton power plant that will be supplied by the Calverton Lateral needs to be constructed prior to construction of the Calverton Lateral. Islander East states that the AES Calverton power plant will require natural gas service to complete start up and commissioning activities. Therefore, it asserts that Islander East will need to construct and complete the lateral and meter station facilities before the power plant is completed. Therefore, Islander East requests that the Commission clarify that Environmental Condition No. 11 to state that Islander East shall not commence construction of the Calverton Lateral prior to the New York PSC approval of the AES Calverton power plant.

135. The purpose of Environmental Condition No. 11 was to assure Islander East's Calverton Lateral was not constructed unless the AES Calverton power plant was constructed. The Commission did not intend for Islander East to wait until the plant was totally completed before commencing construction of the Lateral. Therefore, we will revise Environmental Condition No. 11 to state that Islander East shall not

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[70] *See* final EIS at 3-141.

commence construction of the Calverton Lateral until the New York PSC approves that AES Calverton power plant and AES Calverton commences construction of the power plant. Islander East can construct the Calverton Lateral concurrent with the construction of the power plant.

136. Islander East also states that Environmental Condition No. 21 requires that it complete the HDD installation of the Connecticut shore approach before it can commence construction of the other offshore facilities. It states that it developed its winter offshore construction schedule to minimize environmental impacts on threatened and endangered species at the request of Federal and State regulatory agencies. Islander East states that in order to complete offshore construction during the winter months, it must complete the installation of the HDD section on the Connecticut shore approach and install pipe across Long Island Sound concurrently. Islander East states that the possibility of failure of the HDD is with the pilot hole drilling. Therefore, it requests that the Commission clarify Environmental Condition No. 21 consistent with the Connecticut Siting Council's Decision and Order that requires offshore construction activities, except where related to HDD installation, not occur until the successful completion of the HDD pilot hole.

137. We agree with Islander East's concern and have revised Environmental Condition No. 21 to reflect the requirement that it complete the HDD pilot hole for the Connecticut shore approach before commencing construction of the other offshore facilities. However, we will also require that Islander East file a construction plan for each offshore spread or segment that includes the schedule, locations, and

duration of construction after it completes construction of the pilot hole for approval by the Director of OEP before commencing construction of the other offshore facilities.

5. *State and Local Permits*

138. Finally, as noted above, any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.[71] Islander East and Algonquin shall notify the Commission's environmental staff by telephone and/or facsimile of any environmental noncompliance identified by other Federal, state, or local agencies on the same day that such agency notifies the pipeline. Islander East and Algonquin shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

E. *Other Issues*

1. *Property Values*

139. Many commentors raise concerns regarding the impact the pipeline will have on property values. Generally, compensation for the granting of a pipe-

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[71] *See, e.g.*, Schneidewind v. ANR Pipeline Co., 485 U.S. 293 (1988); National Fuel Gas Supply v. Public Service Commission, 894 F.2d 571 (2d Cir. 1989); and Iroquois Gas Transmission System, L.P., *et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

line easement is determined as the result of negotiations between the pipeline company and the landowner. These negotiations could potentially include compensation for damage to the property or for any perceived loss of property value.[72] If an easement cannot be negotiated with the landowner, the company may exercise in court the right of eminent domain granted to the pipeline under section 7(h) of the NGA. In an eminent domain proceeding, the court will require the pipeline to compensate the landowner for the right-of-way, as well as for any damages incurred during construction. The level of compensation would be determined by the court according to the state laws that set forth the procedures for the use of eminent domain once the Commission issues a certificate.

2. *Performance Bonds / Damages / Liability Insurance*

140. Bradford requests that Commission require that Islander East secure a performance bond for potential financial risks. Pipeline companies are responsible for damages that result from the construction of the pipeline facilities. In its comments on the final EIS, North Branford also requests various conditions requiring that Islander East purchase liability insurance and enter into damage agreements.

141. The Commission is reasonably assured that Islander East will be able to provide for any damages that may result from the construction of the proposed facilities. However, compensation for rights-of-way and for damages that result from the construction of the pipeline facilities generally are issues that are

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[72] *See, e.g.*, Appeal of Giesler, 622 A.2d 408 (1993).

addressed during the easement negotiation process between the pipeline and impacted parties.[73]

F. *Conclusion*

142. Having previously made preliminary findings based on all non-environmental issues relating to Islander East's and Algonquin's applications, and having now conducted an environmental review of the proposal, we are able to determine that the proposed facilities and services are required by the public convenience and necessity. This order incorporates the findings with respect to the non-environmental issues contained in the preliminary determination to the extent they are not modified herein, and constitutes the Commission's final decision on Islander East's and Algonquin's request for authorizations.

143. At a hearing held on September 18, 2002, the Commission, on its own motion, received and made a part of the record all evidence, including the application and exhibits thereto, submitted in this proceeding, and upon consideration of the record,

The Commission orders:

(A) Certificates of public convenience and necessity are issued to Islander East and Algonquin to construct and operate natural gas facilities and lease capacity, as described and conditioned herein and in the December 21 order.

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[73] *See* Agreement among the City of New York, New York City Economic Development Corporation and Iroquois Gas Transmission System, L.P. filed in Docket No. CP00-232-000 on June 18, 2002.

(B) Any certificate and authority issued in a final order in this proceeding will be conditioned, as discussed in this order, on the following:

(1) Islander East and Algonquin completing the authorized construction within two years of the final order; and

(2) Islander East's and Algonquin's complying with paragraphs (a), (c), (e), and (f) of section 157.20 of the Commission's regulations;

(C) Islander East shall maintain separate books, accounts, and records for transportation provided under negotiated rates and for transportation provided under cost-based rates, as discussed in this order.

(D) Islander East shall file sixty days after the order issuing a certificate, rates and pro forma tariff sheets consistent with the discussion in the December 21, order, NAESB (formerly GISB), Order No. 637 standards, and negotiated rate authority in effect at that time.

(E) Islander East shall make a filing within three years after its in-service date, either justifying its existing recourse rates or proposing alternative rates, as discussed in the December 21 order.

(F) Algonquin shall maintain separate records for the Islander East lease comparing the revenue responsibilities with and without the proposed lease and also provide for the tracking of fuel costs associated with Islander East's leased facilities.

(G) Islander East shall execute contracts for the level of service and for the terms of service represented in the precedent agreements prior to commencing construction.

(H) A certificate of public convenience and necessity is issued to Islander East in Docket No.CP01-385-000 for a blanket transportation certificate under Subpart G of Part 284 of the Commission's regulations.

(I) Certificate of public convenience and necessity is issued to Islander East in Docket No. CP01-386000 for a blanket construction certificate to Islander East under Subpart F of Part 157 of the Commission's regulations.

(J) Islander East shall notify the Commission's environmental staff by telephone and/or facsimile of any environmental noncompliance identified by other Federal, state, or local agencies on the same day that such agency notifies Islander East. Islander East shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(K) Meadowcrest's motion to intervene out-of-time is denied. Meadowcrest's motion to intervene on environmental grounds is granted.

(L) All filings are accepted into the record.

(M) The motions to consolidate are denied.

(N) The requests for rehearing are denied, in part, and granted in part, as discussed above.

By the Commission.

(S E A L)

Linwood A. Watson, Jr.,
Deputy Secretary.

Appendix

Environmental Conditions

144. Islander East and Algonquin shall follow the construction procedures and mitigation measures described in its application, supplemental filings, and as identified in the EIS, unless modified by this Order. Islander East and Algonquin must:

a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;

b. justify each modification relative to site-specific conditions;

c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and

d. receive approval in writing from the Director of the OEP **before using that modification.**

2. The Director of OEP has delegated authority to take whatever steps necessary to ensure the protection of all environmental resources during construction and operation of the project. This authority shall allow:

a. the modification of conditions of this Order; and

b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental im-

pacts resulting from project construction and operation.

3. **Prior to any construction**, Islander East and Algonquin shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.

4. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets, and shall include the staff's recommended facility locations. **As soon as they are available, and before the start of construction**, Islander East and Algonquin shall file with the Secretary any revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Islander East's and Algonquin's exercise of eminent domain authority granted under NGA section 7(h) in any condemnation proceedings related to this Order must be consistent with these authorized facilities and locations. Islander East's and Algonquin's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

5. Islander East and Algonquin shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that will be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abuting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction** in or near that area.

This requirement does not apply to route variations recommended herein or minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

a. implementation of cultural resources mitigation measures;

b. implementation of endangered, threatened, or special concern species mitigation measures;

c. recommendations by state regulatory authorities; and

d. agreements with individual landowners that

affect other landowners or could affect sensitive environmental areas.

6. **Within 60 days of the acceptance of this Certificate** and **before construction** begins, Islander East and Algonquin shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Islander East and Algonquin will implement the mitigation measures required by this Order. Islander East and Algonquin must file revisions to the plan as schedules change. The plan shall identify:

a. how Islander East and Algonquin will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction inspection personnel;

b. the number of environmental inspectors assigned per spread, and how the company would ensure that sufficient personnel are available to implement the environmental mitigation;

c. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;

d. what training and instructions Islander East and Algonquin will give to all personnel involved with construction and restoration (initial and refresher training, as the project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);

e. the company personnel (if known) and specific portion of Islander East's and Algonquin's organization having responsibility for compliance;

f. The procedures (including use of contract penalties) Islander East and Algonquin will follow if noncompliance occurs; and

g. For each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

(1) the completion of all required surveys and reports;

(2) the mitigation training of onsite personnel;

(3) the start of construction; and

(4) the start and completion of restoration.

7. Islander East and Algonquin shall employ at least one environmental inspector per construction spread. The environmental inspector shall be:

a. responsible for monitoring and ensuring compliance with all environmental mitigative measures required by this Order, Islander East's and Algonquin's ESC Plan, and other grants, permits, certificates, or other authoring documents;

b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see recommendation 6 above) and any other authorizing documents;

c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;

d. a full-time position separate from all other activity inspectors;

e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/ permit requirements imposed by other Federal, state, or local agencies; and

f. responsible for maintaining status reports.

8. Islander East and Algonquin shall file updated status reports prepared by the head environmental inspector with the Secretary on a **weekly** basis **until** all construction-related activities, including restoration and initial permanent seeding, are complete. On request, these status reports will also be provided to other Federal and state agencies with permitting responsibilities. Status reports shall include:

a. the current construction status of each spread, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;

b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspectors during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirement imposed by other Federal, state, or local agencies);

c. corrective actions implemented in response to all instances of noncompliance, and their

cost;

d. the effectiveness of all corrective actions implemented;

e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and

f. copies of any correspondence received by Islander East or Algonquin from other Federal, state or local permitting agencies concerning instances of noncompliance, and Islander East's and/or Algonquin's response.

9. Islander East and Algonquin must receive written authorization from the Director of OEP **before commencing service** from the project. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way is proceeding satisfactorily.

10. **Within 30 days of placing the certificated facilities in service**, Islander East and Algonquin shall file an affirmative statement with the Secretary, certified by a senior company official:

a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or

b. identifying which of the certificate conditions Islander East and Algonquin have complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously

identified in filed status reports, and the reason for noncompliance.

11. Islander East shall not commence construction of the Calverton Lateral until the New York PSC approves that AES Calverton power plant and AES Calverton commences construction of the power plant.

12. For residential areas and the Branford Land Trust property where Islander East or Algonquin do not test for soil compaction, Islander East and Algonquin shall monitor the progress of revegetation annually for 3 years following construction and file a report on the level of revegetation success each year with the Secretary. If revegetation is unsuccessful in a residential area, Islander East and Algonquin shall identify in the report the measures they plan to implement to restore the area. If an area continues to be unsuccessfully restored after 3 years, Islander East and Algonquin shall file a restoration plan for the area and the landowner's comments on it for the review and written approval of the Director of OEP **prior to its use.**

13. Algonquin and Islander East shall notify the South Central Connecticut Regional Water Authority and the Suffolk County Department of Health Services of activities that would occur within Class I Watershed or aquifer protection area wellhead boundaries. In the event of a spill in a Class I Watershed or an aquifer protection area wellhead boundary, Algonquin and Islander East shall notify the CTDEP and/or NYSDEC, the Haz/Mat Spill Response Program, and the South Central Connecticut Regional Water Authority and/or the Suffolk County De-

partment of Health Services immediately.

14. Islander East shall conduct a site-specific study between mileposts 5.4 and 5.6 to determine if construction activities, particularly blasting, would affect contaminated groundwater migration in this area. Islander East shall prepare a work plan in consultation with the CTDEP **prior to conducting the study**. Islander East shall file documentation of consultations, the work plan, and the results of the study with the Secretary, **prior to construction**.

15. Algonquin shall store all DOT-regulated hazardous materials within secondary containment and obtain approval from the CTDEP **prior** to installing any underground storage tanks at the proposed Cheshire Compressor Station.

16. Islander East's and Algonquin's proposed pre- and post-construction monitoring shall include well yield and water quality for both private and public wells. Water quality testing shall be conducted using testing criteria for new water wells in each state as dictated by each state's Department of Health. **Within 30 days** of placing the facilities in service, Islander East and Algonquin shall file a report with the Secretary discussing whether any complaints were received concerning well yield or water quality and how each was resolved. In addition, Islander East and Algonquin shall file a report with the Secretary identifying all potable water supply systems damaged by construction and how they were repaired.

17. In the event that the HDD of the Carmans or Peconic River fails, Islander East shall file with the Secretary an updated plan including site-specific drawings identifying all areas that would be dis-

turbed by construction using an alternate crossing method at the Carmans and Peconic Rivers on Long Island. Islander East shall file this plan concurrent with its application to the COE and NYSDEC for a permit to construct using this plan. The Director of OEP must review and approve this plan in writing **before construction** of the crossing.

18. Islander East shall submit a Directional Drill Contingency Plan for each waterbody crossed by directional drilling. Each Directional Drill Contingency Plan shall address how Islander East:

a. will handle any inadvertent release of drilling mud into the waterbody or areas adjacent to the waterbody, including procedures to contain inadvertent releases;

b. will seal the abandoned drill hole; and

c. clean up any inadvertent releases.

19. Islander East shall file the completed site-specific contaminated sediment studies in the Sound with the appropriate Federal or state agencies with regulatory authority, and consult with these agencies, to determine which, if any, known or suspected contaminated sites require further investigation and what mitigation may be employed to minimize impact in the event that contaminated areas are crossed. Islander East shall file with the Secretary any comments received from regulatory agencies and identify any mitigation measure development as a result of consultation, **before construction**, for review and written approval from the Director of OEP.

20. Islander East shall obtain trench fill material only from EPA- or state-approved sources, if additional material is needed to establish the required

depth of cover over the pipeline in offshore areas. Islander East shall inform the FERC and the CTDEP or NYSDEC, as appropriate, about their need for extra trench fill and shall provide milepost locations where the extra fill was used.

21. Offshore construction, except where related to HDD installation, shall not occur until Islander East successfully completes the HDD pilot hole for the Connecticut shore approach, and files with the Secretary a construction plan for each offshore spread or segment that includes the schedule, locations, and duration of construction. The Director of OEP must review and approve the offshore construction plan in writing **before construction** in Long Island Sound.

In the event that the directional drill is unsuccessful, Islander East shall file with the CTDEP and the Secretary a plan for the crossing of the Connecticut shore. This shall be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. Islander East shall file this plan concurrent with its application to the COE for a permit to construct using this plan. The Director of OEP must review and approve this plan in writing **before construction** of the crossing.

22. **Before construction**, Islander East shall update the "Directional Drill Monitoring and Operations Program for Natural Gas Pipeline Installation in Long Island Sound" plan to add FERC to the list of agencies that would be contacted in the event of any releases of drilling mud to the environment. A report of any releases and remediation measures taken shall also be included in the notification to all appropriate agencies.

Islander East shall file the updated "Directional Drill Monitoring and Operations Program for Natural Gas Pipeline Installation in Long Island Sound" plan with both the CTDEP and the NYDEC for consultation, **prior to construction**. Islander East shall notify the Secretary in writing of the outcome of the state reviews.

23. **Before construction**, Islander East shall file with the Secretary for review and written approval from the Director of OEP, a plan to perform long-term monitoring to assess the impacts of pipeline construction to the sea floor of Long Island Sound. Monitoring shall occur for a minimum of 5 years unless results indicate that the areas have recovered. The monitoring shall include a comparison of the benthic community structure of the impaired areas (i.e., trench, anchor scar, and areas of anchor sweep) with nearby control areas that have conditions similar to pre-construction conditions. In addition, one component of the monitoring plan shall focus on nearshore shellfish habitat. Upon completion of monitoring, Islander East shall file with the Secretary the results of the monitoring program.

24. Islander East shall use the subsea plow construction method, where technically feasible, between MPs 12.0 and 32.15 for pipeline trenching and backfill operations.

25. **Before construction**, Islander East shall file with the Secretary the final plan for crossing shellfish lease area L-555 and the unleased shellfish areas between MPs 11.5 and 13.0, and documentation of consultation with the State of Connecticut, Department of Agriculture, Aquaculture Bureau, the Town of Branford and the lease holder on the final plan.

26. **Prior to construction**, Islander East shall file with the Secretary copies of all correspondence with the NMFS regarding measures to avoid and minimize potential impacts to EFH and EFH-managed species.

27. **Prior to construction**, Islander East shall file with the Secretary copies of all final site-specific invasive species control plans and correspondence with individuals, organizations, and agencies, including the FWS, COE and EPA, regarding measures to control the introduction and spread of invasive species.

28. Islander East shall continue consultation with the FWS and the NYSDEC regarding the least tern and piping plover and any requirements for surveying, monitoring, or avoiding piping plovers and their habitats. Islander East shall **not begin construction activities** until:

a. the staff receives comments from the FWS regarding the proposed action;

b. the staff completes formal consultation with the FWS, if required; and

c. Islander East has received written notification from the Director of OEP that construction or use of mitigation may begin.

29. Islander East and Algonquin shall file with the Secretary an annual summary monitoring report documenting the revegetation status of each wetland affected by construction.

Post-construction reports shall be filed for each of the first three years, at a minimum, or until each wetland is successfully revegetated. The reports shall include an inventory of exotic nuisance plant species

present on the construction right-of-way. For any wetlands that have not been restored by the third growing season, Islander East and Algonquin shall file with the Secretary a site-specific plan to restore these problem areas, for review and written approval by the Director of OEP.

30. **Prior to construction**, Islander East shall develop a storm contingency and harbor of refuge plans for use during construction of its offshore facilities.

31. For any residence closer than 25 feet to the construction work area, Islander East shall file a site-specific plan with the Secretary for the review and written approval of the Director of OEP **before construction**. The plan shall include:

a. a description of construction techniques to be used (such as reduced pipeline separation, centerline adjustment, use of stove-pipe or drag-section techniques, working over existing pipelines, pipeline crossover, bore, etc.), and include a dimensioned site plan that shows:

(1) the location of the residence in relation to the new pipeline and, where appropriate, the existing pipelines;

(2) the edge of the construction work area;

(3) the edge of the new permanent right-of-way; and

(4) other nearby residences, structures, roads, or waterbodies.

b. a description of how Islander East will ensure the trench is not excavated until the pipe is ready for installation and the trench is

backfilled immediately after pipe installation; and

c. evidence of landowner concurrence if the construction work area and fencing will be located within 10 feet of a residence.

32. Islander East and Algonquin shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/ concerns during construction of the project and restoration of the right-of-way, **prior to construction**. Islander East and Algonquin shall mail the complaint procedures to each landowner whose property would be crossed by the project. In a letter to affected landowners, Islander East and Algonquin shall:

a. provide a local contact that the landowner should call first with their concerns; the letter hall indicate how soon a landowner should expect a response;

b. instruct the landowner that if they are not satisfied with the response to call Islander East and Algonquin's Hotline; the letter shall indicate how soon a landowner should expect a response; and

c. instruct the landowner that if they are still not satisfied with the response from Islander East and Algonquin's Hotline, they should contact the Commission's Enforcement Hotline at (877) 303-4340.

In addition, Islander East and Algonquin shall include in weekly/bi-weekly status reports a copy of a

table that contains the following information for each problem/concern:

- the date of the call;
- the identification number from the certified alignment sheets of the affected property;
- the description of the concern/problem; and
- an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

33. **Before construction**, Islander East shall inspect Mr. Nargi's property at MP 8.9 to determine the feasibility of reconstructing this septic system to code on the land available outside of the proposed pipeline right-of-way and file this information with the Secretary.

34. **Prior to construction**, Islander East shall file with the Secretary an updated list of residences within 50 feet of the construction workspace areas in the Meadowcrest subdivision (MPs CA2.0 to CA2.35) and the Spring Meadow subdivision (MPs CA1.5 to CA1.7). Islander East shall include any newly-identified residences within 25 feet of construction in its requirement for preparation of site-specific plans.

35. **Prior to construction**, Islander East shall develop, with affected landowners or land managers, if requested, and file with the Secretary, a description of how it would control or limit potential all-terrain vehicle use and damage on its right-of-way. Installation of barriers such as gated fences or other obstructions or devices shall be considered.

36. **Before construction**, Islander East shall file with the Secretary any revised construction and restoration plans for crossing the properties admin-

istered by North Haven Land Trust (MP 0.3), the North Branford Land Trust (MP 4.2, 4.3) and the Branford Land Trust (MPs 8.1, 8.9, and 9.7).

37. Prior to construction, Islander East, in consultation with the applicable land management agencies including the applicable land trusts, shall develop site-specific construction plans describing the construction methods that would be used for crossing the trail at MP 10.0 and construction across or adjacent to any other actively used trails within the project area. Islander East shall file the site-specific plans and documentation of consultation with the appropriate land management agencies with the Secretary, **prior to construction**.

At a minimum, the plan shall include site-specific details on:

a. construction and restoration timeframe, including any timing restrictions; and

b. access for hikers.

38. Islander East shall develop and file with the Secretary for review and written approval by the Director of OEP **prior to construction**, a site-specific plan for construction of the pipeline adjacent to the Branford Steam Railroad, including site-specific construction/restoration plans developed in coordination with affected adjacent residential landowners, addressing how Islander East will minimize visual impacts of vegetation clearing for those residences whose vegetative screening will be removed during construction.

39. Islander East shall continue to consult with the Pine Barrens Commission concerning construc-

tion through the Central Pine Barrens. If mitigation is required by any agency for the construction in the Central Pine Barrens, Islander East shall file copies of the final mitigation plan and any related correspondence **prior to construction**.

40. **Prior to construction**, Islander East shall prepare and file with the Secretary a final site-specific Construction, Restoration and Invasive Species Control Plan for the Central Pine Barrens Region.

For the forested areas where tree clearing is required in the Central Pine Barrens, provide a detailed vegetation map that shows the location and types of arboreal species that would be removed, including any Federal or state protected species or local species of concern.

41. **Before construction**, Islander East shall file with the Secretary a plan for the crossing of each segment of the Central Pine Barrens in the event one or more of the proposed HDD segments is unsuccessful. This shall be a site-specific plan that includes scaled drawings identifying all areas that would be disturbed by construction. The Director of OEP must review and approve this plan in writing before an alternate construction methodology may be used in the Central Pine Barrens region.

42. Islander East shall file documentation of concurrence from the New York and Connecticut agencies for its Certification of Consistency with the New York and Connecticut CZMP with the Secretary, **before construction**.

43. Islander East and Algonquin shall defer construction and use of the proposed project facilities together with the use of related ancillary areas for

staging, storage, and temporary work areas and new or to-be-improved access roads, until:

a. Islander East and Algonquin file with the Secretary all additional required cultural resources inventory and evaluation reports, and any necessary treatment plans;

b. Islander East and Algonquin file the appropriate SHPO and any other appropriate parties' comments on all cultural resources investigation reports and plans;

c. The ACHP has been given an opportunity to comment if any historic properties would be affected; and

d. The Director of OEP reviews and approves all cultural resources reports and plans, and notifies Islander East and Algonquin in writing that they may proceed with mitigation programs or construction.

All material filed with the Secretary containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **"CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE."**

44. **Before construction**, Algonquin and Islander East shall prepare a plan to minimize impacts to air quality, including fugitive dust and vehicle emissions, and submit this to the CTDEP and for the review and written approval of the Director of OEP.

45. **Before construction**, Algonquin shall file the following information with the Secretary:

a. make and model number of the turbine or compression to be installed at the Cheshire

Compressor Station; and

b. the manfacturer's emission estimates in tons per year for NO_x, CO, VOC, PM_{10}, and SO_2 for the selected turbine unit.

46. Algonquin shall file a noise survey with the Secretary **no later than 60 days** after placing the Cheshire Compressor Station in service. If the noise attributable to the operation of the station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, Algonquin shall install additional noise controls to meet the level **within 1 year** of the in-service date. Algonquin shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days** after it installs the additional noise controls.

47. Algonquin shall incorporate the high performance noise control measures identified in the February 18, 2002 horizontal directional drilling site noise study into bid requirements and contract specifications for the Juniper Point horizontal directional drilling operation.

48. Islander East shall incorporate the State Route 25 Route Alternative into the proposed route. Islander East shall file a site specific plan for this route alternative with the Secretary for review and written approval by the Director OEP, **prior to construction**. This plan shall include at a minimum the specifications for a directional drill of Horn Pond; location and size of extra workspace; areas where the construction right-of-way can be reduced to no more than 60 feet; erosion control; and restoration.

49. Islander East incorporate the Town Line Variation into the proposed route. Islander East shall file a site specific plan for this variation with the

Secretary for review and written approval by the Director OEP, **prior to construction**. This plan shall include at a minimum the specifications for landowner limitations, including building, storage, and equipment operation.

50. Islander East shall incorporate the Marshalling Yard Variation into the proposed route. Islander East shall also continue to consult with Tilcon regarding its future plans for the marshalling yard.

51. Islander East shall incorporate the Pond Variation into the proposed route. Islander East shall also file with Secretary for review and written approval by the Director of OEP, **prior to the start of construction**, a site-specific plan for the crossing of the pond. This plan shall include, at a minimum: construction methods; extra workspace location, size, and purpose; erosion control methods and placement; restoration and revegetation specifics; and a monitoring plan

52. Islander East shall incorporate the William Floyd Parkway Variation into the proposed route between MPs 41.0 and 42.4.

53. To the extent that they are compatible with any Commission-required alternative routes, Islander East shall incorporate the fourteen route variations contained in Table 4.4.9-1 of the FEIS into the proposed route.

54. Islander East shall run the offshore sedimentation model on the shallower sections of the spoil mounds (at the northern portion of the horizontal directional drill transition basin), prior to submitting the offshore monitoring plan, in order to determine additional near-shore areas that may require monitoring for sedimentation impacts. Islander East shall

file with the Secretary the results of the revised modeling along with the offshore monitoring plan.

55. Islander East shall monitor the near-shore areas for sedimentation impacts. If monitoring results show that the erosion and deposition exceed either the depth of sediment deposition or the areal extent of coverage that was estimated by Islander East's modeling, Islander East is responsible for mitigation of the additional effects. Such mitigation could include clam and oyster seeding or replacement of oyster habitat, sufficient or compensate for the unpredicted impacts. Mitigation shall be determined through consultation with the lease holder and/or appropriate Federal or state agency.

APPENDIX G

UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT
THURGOOD MARSHALL U.S. COURT HOUSE
40 FOLEY SQUARE, NEW YORK, N.Y. 10007

[Filed June 20, 2008]

No. 06-5764-ag

ISLANDER EAST PIPELINE COMPANY, LLC,
Petitioner,

v.

GINA MCCARTHY, COMMISSIONER OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION,
Respondents.

ORDER

Catherine O'Hagan Wolfe, Clerk of Court

At a stated term of the United States Court of Appeals for the Second Circuit, held at the Daniel Patrick Moynihan United States Courthouse, 500 Pearl Street, in the City of New York, on the, 20th day of June two thousand and eight, Petitioner, Islander East Pipeline Company, through counsel having filed a petition for panel rehearing, or, in the alternative, for rehearing *en banc*, and the panel that determined the appeal having considered the request for panel rehearing, and the active members of the Court having considered the request for rehearing *en banc*,

IT IS HEREBY ORDERED that the petition is denied.

For the Court:
Catherine O'Hagan Wolfe, Clerk

By: /s/ Frank Perez
Frank Perez, Deputy Clerk

APPENDIX H

15 USCS § 717. Regulation of natural gas companies

(a) Necessity of regulation in public interest. As disclosed in reports of the Federal Trade Commission made pursuant to S. Res. 83 (Seventieth Congress, first session) and other reports made pursuant to the authority of Congress, it is hereby declared that the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest, and that Federal regulation in matters relating to the transportation of natural gas and the sale thereof in interstate and foreign commerce is necessary in the public interest.

(b) Transactions to which provisions of 15 USCS §§ 717 et seq. applicable. The provisions of this Act [15 USCS §§ 717 et seq.] shall apply to the transportation of natural gas in interstate commerce, to the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use, and to natural-gas companies engaged in such transportation or sale, and to the importation or exportation of natural gas in foreign commerce and to persons engaged in such importation or exportation, but shall not apply to any other transportation or sale of natural gas or to the local distribution of natural gas or to the facilities used for such distribution or to the production or gathering of natural gas.

(c) Intra-state transactions exempt from provisions of 15 USCS §§ 717 et seq.; certification from state commission as conclusive evidence. The provisions of this Act [15 USCS §§ 717 et seq.] shall not apply to any person engaged in or legally authorized to engage in

the transportation in interstate commerce or the sale in interstate commerce for resale, of natural gas received by such person from another person within or at the boundary of a State if all the natural gas so received is ultimately consumed within such State, or to any facilities used by such person for such transportation or sale, provided that the rates and service of such person and facilities be subject to regulation by a State commission. The matters exempted from the provisions of this Act [15 USCS §§ 717 et seq.] by this subsection are hereby declared to be matters primarily of local concern and subject to regulation by the several States. A certification from such State commission to the Federal Power Commission that such State commission has regulatory jurisdiction over rates and service of such person and facilities and is exercising such jurisdiction shall constitute conclusive evidence of such regulatory power of jurisdiction.

(d) Vehicular natural gas jurisdiction. The provisions of this Act [15 USCS §§ 717 et seq.] shall not apply to any person solely by reason of, or with respect to, any sale or transportation of vehicular natural gas if such person is—

(1) not otherwise a natural-gas company; or

(2) subject primarily to regulation by a State commission, whether or not such State commission has, or is exercising, jurisdiction over the sale, sale for resale, or transportation of vehicular natural gas.

* * * *

15 USCS § 717f. Construction, extension, or abandonment of facilities

(a) Extension or improvement of facilities on order of court; notice and hearing. Whenever the Commis-

sion, after notice and opportunity for hearing, finds such action necessary or desirable in the public interest, it may by order direct a natural-gas company to extend or improve its transportation facilities, to establish physical connection of its transportation facilities with the facilities of, and sell natural gas to, any person or municipality engaged or legally authorized to engage in the local distribution of natural or artificial gas to the public, and for such purpose to extend its transportation facilities to communities immediately adjacent to such facilities or to territory served by such natural-gas company, if the Commission finds that no undue burden will be placed upon such natural-gas company thereby: *Provided,* That the Commission shall have no authority to compel the enlargement of transportation facilities for such purposes, or to compel such natural-gas company to establish physical connection or sell natural gas when to do so would impair its ability to render adequate service to its customers.

(b) Abandonment of facilities or services; approval of Commission. No natural-gas company shall abandon all or any portion of its facilities subject to the jurisdiction of the Commission, or any service rendered by means of such facilities, without the permission and approval of the Commission first had and obtained, after due hearing, and a finding by the Commission that the available supply of natural gas is depleted to the extent that the continuance of service is unwarranted, or that the present or future public convenience or necessity permit such abandonment.

(c) Certificate of public convenience and necessity.

(1)(A) No natural-gas company or person which will be a natural-gas company upon completion of any

proposed construction or extension shall engage in the transportation or sale of natural gas, subject to the jurisdiction of the Commission, or undertake the construction or extension of any facilities therefor, or acquire or operate any such facilities or extensions thereof, unless there is in force with respect to such natural-gas company a certificate of public convenience and necessity issued by the Commission authorizing such acts or operations: *Provided, however,* That if any such natural-gas company or predecessor in interest was bona fide engaged in transportation or sale of natural gas, subject to the jurisdiction of the Commission, on the effective date of this amendatory Act, over the route or routes or within the area for which application is made and has so operated since that time, the Commission shall issue such certificate without requiring further proof that public convenience and necessity will be served by such operation, and without further proceedings, if application for such certificate is made to the Commission within ninety days after the effective date of this amendatory Act. Pending the determination of any such application, the continuance of such operation shall be lawful.

(B) In all other cases the Commission shall set the matter for hearing and shall give such reasonable notice of the hearing thereon to all interested persons as in its judgment may be necessary under rules and regulations to be prescribed by the Commission; and the application shall be decided in accordance with the procedure provided in subsection (e) of this section and such certificate shall be issued or denied accordingly: *Provided, however,* That the Commission may issue a temporary certificate in cases of emergency, to assure maintenance of adequate service or to serve particular customers, without notice or hearing,

pending the determination of an application for a certificate, and may by regulation exempt from the requirements of this section temporary acts or operations for which the issuance of a certificate will not be required in the public interest.

(2) The Commission may issue a certificate of public convenience and necessity to a natural-gas company for the transportation in interstate commerce of natural gas used by any person for one or more high-priority uses, as defined, by rule, by the Commission, in the case of—

(A) natural gas sold by the producer to such person; and

(B) natural gas produced by such person.

(d) Application for certificate of public convenience and necessity. Application for certificates shall be made in writing to the Commission, be verified under oath, and shall be in such form, contain such information, and notice thereof shall be served upon such interested parties and in such manner as the Commission shall, by regulation, require.

(e) Granting of certificate of public convenience and necessity. Except in the cases governed by the provisos contained in subsection (c)(1) of this section, a certificate shall be issued to any qualified applicant therefor, authorizing the whole or any part of the operation, sale, service, construction, extension, or acquisition covered by the application, if it is found that the applicant is able and willing properly to do the acts and to perform the service proposed and to conform to the provisions of the Act [15 USCS §§ 717 et seq.] and the requirements, rules, and regulations of the Commission thereunder, and that the proposed service, sale, operation, construction, extension, or

acquisition, to the extent authorized by the certificate, is or will be required by the present or future public convenience and necessity; otherwise such application shall be denied. The Commission shall have the power to attach to the isssuance of the certificate and to the exercise of the rights granted thereunder such reasonable terms and conditions as the public convenience and necessity may require.

(f) Determination of service area; jurisdiction of transportation to ultimate customers.

(1) The Commission, after a hearing had upon its own motion or upon application, may determine the service area to which each authorization under this section is to be limited. Within such service area as determined by the Commission a natural-gas company may enlarge or extend its facilities for the purpose of supplying increased market demands in such service area without further authorization; and

(2) If the Commission has determined a service area pursuant to this subsection, transportation to ultimate consumers in such service area by the holder of such service area determination, even if across State lines, shall be subject to the exclusive jurisdiction of the State commission in the State in which the gas is consumed. This section shall not apply to the transportation of natural gas to another natural gas company.

(g) Certificate of public convenience and necessity for service of area already being served. Nothing contained in this section shall be construed as a limitation upon the power of the Commission to grant certificates of public convenience and necessity for service of an area already being served by another natural-gas company.

(h) Right of eminent domain for construction of pipelines, etc. When any holder of a certificate of public convenience and necessity cannot acquire by contract, or is unable to agree with the owner of property to the compensation to be paid for, the necessary right-of-way to construct, operate, and maintain a pipe line or pipe lines for the transportation of natural gas, and the necessary land or other property, in addition to right-of-way, for the location of compressor stations, pressure apparatus, or other stations or equipment necessary to the proper operation of such pipe line or pipe lines, it may acquire the same by the exercise of the right of eminent domain in the district court of the United States for the district in which such property may be located, or in the State courts. The practice and procedure in any action or proceeding for that purpose in the district court of the United States shall conform as nearly as may be with the practice and procedure in similar action or proceeding in the courts of the State where the property is situated: *Provided,* That the United States district courts shall only have jurisdiction of cases when the amount claimed by the owner of the property to be condemned exceeds $ 3,000.

* * * *

15 USCS § 717n. Process coordination; hearings; rules of procedure

(a) "Federal authorization" defined. In this section, the term "Federal authorization"—

(1) means any authorization required under Federal law with respect to an application for authorization under section 3 [15 USCS § 717b] or a certificate of public convenience and necessity under section 7 [15 USCS § 717f]; and

(2) includes any permits, special use authorizations, certifications, opinions, or other approvals as may be required under Federal law with respect to an application for authorization under section 3 [15 USCS § 717b] or a certificate of public convenience and necessity under section 7 [15 USCS § 717f].

(b) Designation as lead agency.

(1) In general. The Commission shall act as the lead agency for the purposes of coordinating all applicable Federal authorizations and for the purposes of complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(2) Other agencies. Each Federal and State agency considering an aspect of an application for Federal authorization shall cooperate with the Commission and comply with the deadlines established by the Commission.

(c) Schedule.

(1) Commission authority to set schedule. The Commission shall establish a schedule for all Federal authorizations. In establishing the schedule, the Commission shall—

(A) ensure expeditious completion of all such proceedings; and

(B) comply with applicable schedules established by Federal law.

(2) Failure to meet schedule. If a Federal or State administrative agency does not complete a proceeding for an approval that is required for a Federal authorization in accordance with the schedule established by the Commission, the applicant may pursue remedies under section 19(d) [15 USCS § 717r(d)].

(d) Consolidated record. The Commission shall, with the cooperation of Federal and State administrative agencies and officials, maintain a complete consolidated record of all decisions made or actions taken by the Commission or by a Federal administrative agency or officer (or State administrative agency or officer acting under delegated Federal authority) with respect to any Federal authorization. Such record shall be the record for—

(1) appeals or reviews under the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), provided that the record may be supplemented as expressly provided pursuant to section 319 of that Act [16 USCS § 1465]; or

(2) judicial review under section 19(d) [15 USCS § 717r(d)] of decisions made or actions taken of Federal and State administrative agencies and officials, provided that, if the Court determines that the record does not contain sufficient information, the Court may remand the proceeding to the Commission for further development of the consolidated record.

(e) Hearings; parties. Hearings under this Act [15 USCS §§ 717 et seq.] may be held before the Commission, any member or members thereof, or any representative of the Commission designated by it, and appropriate records thereof shall be kept. In any proceeding before it, the Commission in accordance with such rules and regulations as it may prescribe, may admit as a party any interested State, State commission, municipality or any representative of interested consumers or security holders, or any competitor of a party to such proceeding, or any other person whose participation in the proceeding may be in the public interest.

(f) Procedure. All hearings, investigations, and proceedings under this Act [15 USCS §§ 717 et seq.] shall be governed by rules of practice and procedure to be adopted by the Commission, and in the conduct thereof the technical rules of evidence need not be applied. No informality in any hearing, investigation, or proceeding or in the manner of taking testimony shall invalidate any order, decision, rule, or regulation issued under the authority of this Act [15 USCS §§ 717 et seq.].

* * * *

15 USCS § 717r. Rehearing and review

(a) Application for rehearing; time. Any person, State, municipality, or State commission aggrieved by an order issued by the Commission in a proceeding under this Act [15 USCS §§ 717 et seq.] to which such person, State, municipality, or State commission is a party may apply for a rehearing within thirty days after the issuance of such order. The application for rehearing shall set forth specifically the ground or grounds upon which such application is based. Upon such application the Commission shall have power to grant or deny rehearing or to abrogate or modify its order without further hearing. Unless the Commission acts upon the application for rehearing within thirty days after it is filed, such application may be deemed to have been denied. No proceeding to review any order of the Commission shall be brought by any person unless such person shall have made application to the Commission for a rehearing thereon. Until the record in a proceeding shall have been filed in a court of appeals, as provided in subsection (b), the Commission may at any time, upon reasonable notice and in such manner as it shall deem proper, modify or set aside, in whole or in part, any finding or order

made or issued by it under the provisions of this Act [15 USCS §§ 717 et seq.].

(b) Review of Commission order. Any party to a proceeding under this Act [15 USCS §§ 717 et seq.] aggrieved by an order issued by the Commission in such proceeding may obtain a review of such order in the [circuit] court of appeals of the United States for any circuit wherein the natural-gas company to which the order relates is located or has its principal place of business, or in the United States Court of Appeals for the District of Columbia, by filing in such court, within sixty days after the order of the Commission upon the application for rehearing, a written petition praying that the order of the Commission be modified or set aside in whole or in part. A copy of such petition shall forthwith be transmitted by the clerk of the court to any member of the Commission and thereupon the Commission shall file with the court the record upon which the order complained of was entered, as provided in section 2112 of title 28, United States Code [28 USCS § 2112]. Upon the filing of such petition such court shall have jurisdiction, which upon the filing of the record with it shall be exclusive, to affirm, modify, or set aside such order in whole or in part. No objection to the order of the Commission shall be considered by the court unless such objection shall have been urged before the Commission in the application for rehearing unless there is reasonable ground for failure so to do. The finding of the Commission as to the facts, if supported by substantial evidence, shall be conclusive. If any party shall apply to the court for leave to adduce additional evidence, and shall show to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for failure to adduce such evidence in the proceedings

before the Commission, the court may order such additional evidence to be taken before the Commission and to be adduced upon the hearing in such manner and upon such terms and conditions as to the court may seem proper. The Commission may modify its findings as to the facts by reason of the additional evidence so taken, and it shall file with the court such modified or new findings, which if supported by substantial evidence, shall be conclusive, and its recommendations, if any, for the modification or setting aside of the original order. The judgment and decree of the court, affirming, modifying, or setting aside, in whole or in part, any such order of the Commission, shall be final, subject to review by the Supreme Court of the United States upon certiorari or certification as provided in sections 239 and 240 of the Judicial Code, as amended [28 USCS § 1254].

(c) Stay of Commission order. The filing of an application for rehearing under subsection (a) shall not, unless specifically ordered by the Commission, operate as a stay of the Commission's order. The commencement of proceedings under subsection (b) of this section shall not, unless specifically ordered by the court, operate as a stay of the Commission's order.

(d) Judicial review.

(1) In general. The United States Court of Appeals for the circuit in which a facility subject to section 3 or section 7 [15 USCS § 717b or 717f] is proposed to be constructed, expanded, or operated shall have original and exclusive jurisdiction over any civil action for the review of an order or action of a Federal agency (other than the Commission) or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit, license, concur-

rence, or approval (hereinafter collectively referred to as "permit") required under Federal law, other than the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.).

(2) Agency delay. The United States Court of Appeals for the District of Columbia shall have original and exclusive jurisdiction over any civil action for the review of an alleged failure to act by a Federal agency (other than the Commission) or State administrative agency acting pursuant to Federal law to issue, condition, or deny any permit required under Federal law, other than the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.), for a facility subject to section 3 or section 7 [15 USCS § 717b or 717f]. The failure of an agency to take action on a permit required under Federal law, other than the Coastal Zone Management Act of 1972, in accordance with the Commission schedule established pursuant to section 15(c) [16 USCS § 717n(c)] shall be considered inconsistent with Federal law for the purposes of paragraph (3).

(3) Court action. If the Court finds that such order or action is inconsistent with the Federal law governing such permit and would prevent the construction, expansion, or operation of the facility subject to section 3 or section 7 [15 USCS § 717b or 717f], the Court shall remand the proceeding to the agency to take appropriate action consistent with the order of the Court. If the Court remands the order or action to the Federal or State agency, the Court shall set a reasonable schedule and deadline for the agency to act on remand.

(4) Commission action. For any action described in this subsection, the Commission shall file with the

Court the consolidated record of such order or action to which the appeal hereunder relates.

(5) Expedited review. The Court shall set any action brought under this subsection for expedited consideration.

* * * *

33 USCS § 1251. Congressional declaration of goals and policy

(a) Restoration and maintenance of chemical, physical and biological integrity of Nation's waters; national goals for achievement of objective. The objective of this Act [33 USCS §§ 1251 et seq.] is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this Act [33 USCS §§ 1251 et seq.]—

(1) it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;

(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

(3) it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;

(4) it is the national policy that Federal financial assistance be provided to construct publicly owned waste treatment works;

(5) it is the national policy that areawide waste treatment management planning processes be devel-

oped and implemented to assure adequate control of sources of pollutants in each State;

(6) it is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans; and

(7) it is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act [33 USCS §§ 1251 et seq.] to be met through the control of both point and nonpoint sources of pollution.

(b) Congressional recognition, preservation, and protection of primary responsibilities and rights of States. It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this Act [33 USCS §§ 1251 et seq.]. It is the policy of Congress that the States manage the construction grant program under this Act [33 USCS §§ 1251 et seq.] and implement the permit programs under sections 402 and 404 of this Act [33 USCS §§ 1342, 1344]. It is further the policy of the Congress to support and aid research relating to the prevention, reduction, and elimination of pollution, and to provide Federal technical services and financial aid to State and interstate agencies and municipalities in connection with the prevention, reduction, and elimination of pollution.

(c) Congressional policy toward Presidential activities with foreign countries. It is further the policy of Congress that the President, acting through the Secretary of State and such national and international organizations as he determines appropriate, shall take such action as may be necessary to insure that to the fullest extent possible all foreign countries shall take meaningful action for the prevention, reduction, and elimination of pollution in their waters and in international waters and for the achievement of goals regarding the elimination of discharge of pollutants and the improvement of water quality to at least the same extent as the United States does under its laws.

(d) Administrator of Environmental Protection Agency to administer 33 USCS §§ 1251 et seq. Except as otherwise expressly provided in this Act [33 USCS §§ 1251 et seq.], the Administrator of the Environmental Protection Agency (hereinafter in this Act called "Administrator") shall administer this Act [33 USCS §§ 1251 et seq.].

(e) Public participation in development, revision, and enforcement of any regulation, etc. Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this Act [33 USCS §§ 1251 et seq.] shall be provided for, encouraged, and assisted by the Administrator and the States. The Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such processes.

(f) Procedures utilized for implementing 33 USCS §§ 1251 et seq. It is the national policy that to the maximum extent possible the procedures utilized for

implementing this Act [33 USCS §§ 1251 et seq.] shall encourage the drastic minimization of paperwork and interagency decision procedures, and the best use of available manpower and funds, so as to prevent needless duplication and unnecessary delays at all levels of government.

(g) Authority of States over water. It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this Act [33 USCS §§ 1251 et seq.]. It is the further policy of Congress that nothing in this Act [33 USCS §§ 1251 et seq.] shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources.

* * * *

33 USCS § 1313. Water quality standards and implementation plans

(a) Existing water quality standards.

(1) In order to carry out the purpose of this Act [33 USCS §§ 1251 et seq.], any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is awaiting approval by, the Administrator pursuant to this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect

immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972]. If the Administrator makes such a determination he shall, within three months after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], has adopted, pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972]. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this Act [33 USCS §§ 1251 et seq.] unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972]. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after such notification, the Administrator shall promulgate such

changes in accordance with subsection (b) of this section.

(3)(A) Any State which prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972] has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

(b) Proposed regulations.

(1) The Administrator shall promptly prepare and publish proposed regulations setting forth water quality standards for a State in accordance with the applicable requirements of this Act as in effect im-

mediately prior to the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972], if—

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section.

(B) a water quality standard submitted by such State under subsection (a) of this section is determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

(c) Review; revised standards; publication.

(1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with the date of enactment of the Federal Water Pollution Control Act Amendments of 1972 [enacted Oct. 18, 1972]) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2)(A) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new

water quality standard shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this Act [33 USCS §§ 1251 et seq.]. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of this Act [33 USCS § 1317(a)(1)] for which criteria have been published under section 304(a) [33 USCS § 1314(a)], the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available, whenever a State reviews water quality standards pursuant to paragraph (1), or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 304(a)(8) [33 USCS § 1314(a)(8)]. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other permit conditions based on or involving biological monitoring or assessment methods or previously adopted numerical criteria.

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this Act [33 USCS §§ 1251 et seq.], such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the applicable requirements of this Act [33 USCS §§ 1251 et seq.], he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved—

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this Act [33 USCS §§ 1251 et seq.], or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this Act [33 USCS §§ 1251 et seq.].

The Administrator shall promulgate any revised or new standard under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard

which the Administrator determines to be in accordance with this Act [33 USCS §§ 1251 et seq.].

(d) Identification of areas with insufficient controls; maximum daily load; certain effluvient limitations revision.

(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(B) [33 USCS § 1311(b)(1)(A), (B)] are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 301 [33 USCS § 1311] are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 304(a)(2) [33 USCS § 1314(a)(2)] as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1)(B) of this subsection the

total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife. Such estimates shall take into account the normal water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 304(a)(2)(D) [33 USCS § 1314(a)(2)(D)], for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 304(a)(2) [33 USCS § 1314(a)(2)] as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish and wildlife.

(4) Limitations on revision of certain effluent limitations.

(A) Standard not attained. For waters identified under paragraph (1)(A) where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section.

(B) Standard attained. For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard

may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

(e) Continuing planning process.

(1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this Act [33 USCS §§ 1251 et seq.].

(2) Each State shall submit not later than 120 days after the date of the enactment of the Water Pollution Control Amendments of 1972 [enacted Oct. 18, 1972] to the Administrator for his approval a proposed continuing planning process which is consistent with this Act [33 USCS §§ 1251 et seq.]. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this Act [33 USCS §§ 1251 et seq.]. The Administrator shall not approve any State permit program under title IV of this Act [33 USCS §§ 1341 et seq.] for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include, but are not limited to, the following:

(A) effluent limitations and schedules of compliance at least as stringent as those required by section 301(b)(1), section 301(b)(2), section 306, and section 307 [33 USCS §§ 1311(b)(1), (2), 1316, 1317], and

at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;

(B) the incorporation of all elements of any applicable area-wide waste management plans under section 208 [33 USCS § 1288], and applicable basin plans under section 209 of this Act [33 USCS § 1289];

(C) total maximum daily load for pollutants in accordance with subsection (d) of this section;

(D) procedures for revision;

(E) adequate authority for intergovernmental cooperation;

(F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;

(G) controls over the disposition of all residual waste from any water treatment processing;

(H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 301 and 302 [33 USCS §§ 1311, 1312].

(f) Earlier compliance. Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 301(b)(1) and 301(b)(2) [33 USCS § 1311(b)(1), (2)] nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

(g) Heat standards. Water quality standards relating to heat shall be consistent with the requirements of section 316 of this Act [33 USCS § 1326].

(h) Thermal water quality standards. For the purposes of this Act [33 USCS §§ 1251 et seq.] the term "water quality standards" includes thermal water quality standards.

(i) Coastal recreation water quality criteria.

(1) Adoption by States.

(A) Initial criteria and standards. Not later than 42 months after the date of the enactment of this subsection [enacted Oct. 10, 2000], each State having coastal recreation waters shall adopt and submit to the Administrator water quality criteria and standards for the coastal recreation waters of the State for those pathogens and pathogen indicators for which the Administrator has published criteria under section 304(a) [33 USCS § 1314(a)].

(B) New or revised criteria and standards. Not later than 36 months after the date of publication by the Administrator of new or revised water quality criteria under section 304(a)(9) [33 USCS § 1314(a)(9)], each State having coastal recreation waters shall adopt and submit to the Administrator new or revised water quality standards for the coastal recreation waters of the State for all pathogens and pathogen indicators to which the new or revised water quality criteria are applicable.

(2) Failure of States to adopt.

(A) In general. If a State fails to adopt water quality criteria and standards in accordance with paragraph (1)(A) that are as protective of human health as the criteria for pathogens and pathogen indicators for coastal recreation waters published by the Administrator, the Administrator shall promptly propose regulations for the State setting forth revised

or new water quality standards for pathogens and pathogen indicators described in paragraph (1)(A) for coastal recreation waters of the State.

(B) Exception. If the Administrator proposes regulations for a State described in subparagraph (A) under subsection (c)(4)(B), the Administrator shall publish any revised or new standard under this subsection not later than 42 months after the date of the enactment of this subsection [enacted Oct. 10, 2000].

(3) Applicability. Except as expressly provided by this subsection, the requirements and procedures of subsection (c) apply to this subsection, including the requirement in subsection (c)(2)(A) that the criteria protect public health and welfare.

* * * *

33 U.S.C. § 1341. Certification

(a) Compliance with applicable requirements; application; procedures; license suspension.

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317]. In the case of any such activity for which there is not an applicable effluent limitation or other limitation

under sections 301(b) and 302 [33 USCS §§ 1311(b), 1312], and there is not an applicable standard under sections 306 and 307 [33 USCS §§ 1316, 1317], the State shall so certify, except that any such certification shall not be deemed to satisfy section 511(c) of this Act [33 USCS § 1371(c)]. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that

such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 303, 306, and 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317] because of changes since the construction license or

permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 301, 302, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such li-

cense or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 301, 302, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this Act [33 USCS §§ 1251 et seq.] that such facility or activity has been operated in violation of the applicable provisions of section 301, 302, 303, 306, or 307 of this Act [33 USCS §§ 1311, 1312, 1313, 1316, 1317].

(6) Except with respect to a permit issued under section 402 of this Act [33 USCS § 1342], in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

(b) Compliance with other provisions of law setting applicable water quality requirements. Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administra-

tor shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees. In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensee or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Limitations and monitoring requirements of certification. Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this Act [33 USCS § 1311 or 1312], standard of performance under section 306 of this Act [33 USCS § 1316], or prohibition, effluent standard, or pretreatment standard under section 307 of this Act [33 USCS § 1317], and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal

license or permit subject to the provisions of this section.

* * * *

33 USCS § 1371. Authority under other laws and regulations

(a) Impairment of authority or functions of officials and agencies; treaty provisions. This Act [33 USCS §§ 1251 et seq.] shall not be construed as (1) limiting the authority or functions of any officer or agency of the United States under any other law or regulation not inconsistent with this Act [33 USCS §§ 1251 et seq.]; (2) affecting or impairing the authority of the Secretary of the Army (A) to maintain navigation or (B) under the Act of March 3, 1899 (30 Stat. 1112); except that any permit issued under section 404 of this Act [33 USCS § 1344] shall be conclusive as to the effect on water quality of any discharge resulting from any activity subject to section 10 of the Act of March 3, 1899 [33 USCS § 403], or (3) affecting or impairing the provisions of any treaty of the United States.

(b) Discharges of pollutants into navigable waters. Discharges of pollutants into the navigable waters subject to the Rivers and Harbors Act of 1910 (36 Stat. 593; 33 U.S.C. 421) and the Supervisory Harbors Act of 1888 (25 Stat. 209; 33 U.S.C. 441-451b) shall be regulated pursuant to this Act [33 USCS §§ 1251 et seq.], and not subject to such Act of 1910 and the Act of 1888 except as to effect on navigation and anchorage.

(c) Action of the Administrator deemed major Federal action; construction of the National Environmental Policy Act of 1969.

(1) Except for the provision of Federal financial assistance for the purpose of assisting the construction of publicly owned treatment works as authorized by section 201 of this Act [33 USCS § 1281], and the issuance of a permit under section 402 of this Act [33 USCS § 1342] for the discharge of any pollutant by a new source as defined in section 306 of this Act [33 USCS § 1316], no action of the Administrator taken pursuant to this Act [33 USCS §§ 1251 et seq.] shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (83 Stat. 852); and

(2) Nothing in the National Environmental Policy Act of 1969 (83 Stat. 852) shall be deemed to—

(A) authorize any Federal agency authorized to license or permit the conduct of any activity which may result in the discharge of a pollutant into the navigable waters to review any effluent limitation or other requirement established pursuant to this Act [33 USCS §§ 1251 et seq.] or the adequacy of any certification under section 401 of this Act [33 USCS § 1341]; or

(B) authorize any such agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this Act [33 USCS §§ 1251 et seq.].

(d) Consideration of international water pollution control agreements. Notwithstanding this Act [33 USCS §§ 1251 et seq.] or any other provision of law, the Administrator (1) shall not require any State to consider in the development of the ranking in order of priority of needs for the construction of treatment

works (as defined in title II of this Act [33 USCS §§ 1281 et seq.]), any water pollution control agreement which may have been entered into between the United States and any other nation, and (2) shall not consider any such agreement in the approval of any such priority ranking.

* * * *

42 USCS § 4332. Cooperation of agencies; reports; availability of information; recommendations; international and national coordination of efforts

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act [42 USCS §§ 4321 et seq.], and (2) all agencies of the Federal Government shall—

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment;

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act [42 USCS §§ 4341 et seq.], which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal

actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, United States Code, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

(i) the State agency or official has statewide jurisdiction and has the responsibility for such action,

(ii) the responsible Federal official furnishes guidance and participates in such preparation,

(iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and

(iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepares a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under this Act [42 USCS §§ 4321 et seq.]; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.[;]

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and longrange character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions,

and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by title II of this Act [42 USCS §§ 4341 et seq.].

* * * *

40 C.F.R. § 131.10 Designation of uses.

(a) Each State must specify appropriate water uses to be achieved and protected. The classification of the waters of the State must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation. In no case shall a State adopt waste transport or waste assimilation as a designated use for any waters of the United States.

(b) In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

(c) States may adopt sub-categories of a use and set the appropriate criteria to reflect varying needs of such sub-categories of uses, for instance, to differentiate between cold water and warm water fisheries.

(d) At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under sections 301(b) and 306 of the Act and cost-effective and reasonable best management practices for nonpoint source control.

(e) Prior to adding or removing any use, or establishing sub-categories of a use, the State shall provide notice and an opportunity for a public hearing under § 131.20(b) of this regulation.

(f) States may adopt seasonal uses as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria should be adjusted to reflect the seasonal uses, however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season.

(g) States may remove a designated use which is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

(1) Naturally occurring pollutant concentrations prevent the attainment of the use; or

(2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent

discharges without violating State water conservation requirements to enable uses to be met; or

(3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

(5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

(6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

(h) States may not remove designated uses if:

(1) They are existing uses, as defined in § 131.3, unless a use requiring more stringent criteria is added; or

(2) Such uses will be attained by implementing effluent limits required under sections 301(b) and 306 of the Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

(i) Where existing water quality standards specify designated uses less than those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.

(j) A State must conduct a use attainability analysis as described in § 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria.

(k) A State is not required to conduct a use attainability analysis under this regulation whenever designating uses which include those specified in section 101(a)(2) of the Act.

* * * *

40 C.F.R. § 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accom-

modate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.

(3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

* * * *

40 C.F.R. § 1501.5 Lead agencies.

(a) A lead agency shall supervise the preparation of an environmental impact statement if more than one Federal agency either:

(1) Proposes or is involved in the same action; or

(2) Is involved in a group of actions directly related to each other because of their functional interdependence or geographical proximity.

(b) Federal, State, or local agencies, including at least one Federal agency, may act as joint lead agen-

cies to prepare an environmental impact statement (§ 1506.2).

(c) If an action falls within the provisions of paragraph (a) of this section the potential lead agencies shall determine by letter or memorandum which agency shall be the lead agency and which shall be cooperating agencies. The agencies shall resolve the lead agency question so as not to cause delay. If there is disagreement among the agencies, the following factors (which are listed in order of descending importance) shall determine lead agency designation:

(1) Magnitude of agency's involvement.

(2) Project approval/disapproval authority.

(3) Expertise concerning the action's environmental effects.

(4) Duration of agency's involvement.

(5) Sequence of agency's involvement.

(d) Any Federal agency, or any State or local agency or private person substantially affected by the absence of lead agency designation, may make a written request to the potential lead agencies that a lead agency be designated.

(e) If Federal agencies are unable to agree on which agency will be the lead agency or if the procedure described in paragraph (c) of this section has not resulted within 45 days in a lead agency designation, any of the agencies or persons concerned may file a request with the Council asking it to determine which Federal agency shall be the lead agency.

A copy of the request shall be transmitted to each potential lead agency. The request shall consist of:

(1) A precise description of the nature and extent of the proposed action.

(2) A detailed statement of why each potential lead agency should or should not be the lead agency under the criteria specified in paragraph (c) of this section.

(f) A response may be filed by any potential lead agency concerned within 20 days after a request is filed with the Council. The Council shall determine as soon as possible but not later than 20 days after receiving the request and all responses to it which Federal agency shall be the lead agency and which other Federal agencies shall be cooperating agencies.

APPENDIX I

Connecticut Water Quality Standards

1. It is the State's goal to restore or maintain the chemical, physical, and biological integrity of surface waters. Where attainable, the level of water quality that provides for the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water shall be achieved.

2. Existing and designated uses such as propagation of fish, shellfish, and wildlife, recreation, public water supply, agriculture, industrial use and navigation, and the water necessary for their protection is to be maintained and protected.

* * * *

5. If the Commissioner designates a high-quality surface water as an Outstanding National Resource Water pursuant to federal regulations at 40 CFR 131.12(a) the high water quality shall be maintained and protected. The lowering of water quality is prohibited for such surface waters except where activities limited in time and scope will result in a only temporary and insignificant changes in water quality and the activities will not result in water quality less than necessary to protect existing and designated uses.

APPENDIX J

CONNECTICUT ANTI-DEGRADATION IMPLEMENTATION POLICY

I. PURPOSE. The purpose of this policy is to establish procedures to implement Connecticut's anti-degradation policy as required by the federal Clean Water Act (Title 40 Part 131.12) and Connecticut's Surface Water Quality Standards 2 through 5. This policy requires the maintenance and protection of water quality in high quality waters and protection and maintenance of existing uses in all cases.

II. APPLICABILITY. The procedures outlined in this policy apply to any proposed new or increased point source, non point source or atmospheric discharge, dredging activity or discharge of dredged or fill materials to surface waters, any activity requiring a permit pursuant to Chapter 440 or 446i-k of the Connecticut General Statutes or requiring Water Quality Certification pursuant to Section 401 of the Clean Water Act, or requiring State concurrence in accordance with Section 307 of the Federal Coastal Zone Management Act.

III. SURFACE WATER RESOURCES TO BE MAINTAINED AT EXISTING HIGH QUALITY.

1) Outstanding National Resource Waters

Should the Commissioner designate a high quality surface water as an Outstanding National Resource Water at any time after the effective date of these Water Quality Standards, such water will be managed consistent with Standard 5 of these Water Quality Standards.

2) Class AA, A and SA waters

The Commissioner shall not issue any certificate or permit for any regulated discharge, dredging activity or discharge of fill and dredged materials unless the Commissioner finds that all existing and designated uses as defined in these water quality standards will be protected fully and the discharge is consistent with the use goals of these Water Quality Standards and the hypoxia management actions contained in the Total Maximum Daily Load to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound.

The Commissioner may issue a certificate or permit for a point source discharge to Class AA, A, or SA waters provided:

(a) the discharge will be of limited duration and is necessary to remediate an existing surface or ground water pollution problem, or

(b) the discharge will consist of clean water, treated backwash waters from public or private drinking water treatment systems, dredging activity, water from dredged material dewatering operations, or discharge of dredged or fill material and such discharge will not result in violation of Class A, AA or SA standards.

The Commissioner may issue a certificate or permit for a non-point discharge to Class AA, A, or SA waters provided:

(a) appropriate Best Management Practices as determined by the Commissioner are em-

ployed by the certificate holder or permittee and,

(b) in the case of a dredging activity or discharge of dredged or fill material, the Commissioner finds that the resulting change in water quality will not be significant in accordance with paragraph IV.1 of this appendix.

3) High quality Class B or SB water resources, i.e. those with a quality better than criteria for that Class contained in the Water Quality Standards and which support a designated uses, will be maintained at their existing high quality unless:

(a) the Commissioner finds, in accordance with paragraph IV.1 of this Anti-Degradation Policy that the resulting change in water quality would not be significant; or

(b) the Commissioner finds in accordance with paragraph IV.1 of this Anti-Degradation Policy and after adequate opportunity for intergovernmental and public participation, that allowing lower water quality is necessary to accommodate overriding State economic or social development; provided

(c) in all cases the Commissioner finds that existing and designated uses will be protected fully, and the discharge is consistent with the hypoxia management actions contained in *"A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound"*, dated December 28, 2000.

IV. ANTI-DEGRADATION EVALUATION PROCEDURES FOR CLASS B AND SB WATER RESOURCES

1) *Determination of significant lowering of water quality* - In the course of an application for a proposed regulated discharge or activity the Commissioner shall determine whether the proposed discharge or activity will result in a significant change in water quality by utilizing all relevant available data and the best professional judgment of Department staff. Factors to be considered in making this determination include, but are not limited to:

   (a) expected percent change in each applicable water quality parameter resulting from such regulated discharge or activity;

   (b) quality and ecological value of the proposed receiving surface water;

   (c) cumulative impact of the proposed discharge or activity on water quality of the proposed receiving surface water, taking into account all other existing regulated discharges and activities therein;

   (d) impact of the proposed discharge or activity on aquatic biota and habitat;

   (e) eutrophic impacts of the proposed discharge or activity on the proposed receiving water;

   (f) impact of the proposed discharge or activity on existing, designated, and potential uses of the proposed receiving surface water; and

   (g) the remaining ability of the proposed receiving surface water to assimilate additional regulated discharges and support additional

regulated activities if the proposed discharge or activity is approved.

2) *Determination that allowing lower water quality is necessary to accommodate overriding economic and social development* - If the Commissioner determines that a proposed discharge or activity will significantly lower water quality in a high quality Class B or SB water, he or she shall not issue a permit or certificate unless he or she finds that allowing lower water quality *is necessary* to accommodate *overriding economic and social development* which he or she has determined is clearly in the public interest. The Commissioner shall ensure that notwithstanding a lowering of water quality existing and designated uses will be protected fully.

(a) The proposed lowering of water quality will be found to be *necessary* only if the applicant for the proposed discharge or activity demonstrates to the satisfaction of the Commissioner that:

(i) alternatives to the proposed discharge or activity are not technologically feasible, or

(ii) applicable pollution control alternatives are prohibitively expensive.

(b) The applicant for a proposed discharge or activity that would result in a lowering of water quality in a proposed receiving surface water shall demonstrate to the Commissioner's satisfaction that the following alternatives have been adequately considered:

(i) alternative locations for the proposed discharge or activity;

(ii) reduction in scale of the proposed discharge or activity;

(iii) pollution prevention measures which could eliminate or minimize the effects of the proposed discharge or activity;

(iv) water use or recycle measures which could eliminate or minimize the effects of the discharge or activity;

(v) process changes or alternative technology which could minimize the effects of the proposed discharge or activity

(vi) improved operation and maintenance of existing facilities in order to minimize the effects of the proposed discharge or activity;

(vii) alternative methods of treatment and advanced treatment beyond applicable technology requirements of the Clean Water Act and,

(viii) any other alternative required by the Commissioner to minimize the effects of the proposed discharge or activity.

The applicant for a proposed permit or activity which will cause a lowering of water quality shall demonstrate to the Commissioner's satisfaction the overriding economic or social benefits to the State which will result from the proposed discharge or activity. The applicant shall document the loss or reduction of aquatic life, aquatic habitat including riparian vegetation, passive and ac-

tive recreational value, and aesthetic value which may result from lower water quality.

3) The Commissioner shall insure that the highest statutory and regulatory requirements be achieved for all new and existing point source discharges and cost-effective and reasonable best management practices for non-point source controls be implemented consistent with Standard 4 of these water Quality Standards.

4) The Commissioner may order correction of any treatment system and abatement of pollution from any permitted discharge as provided for in Section 22a-431 of the Connecticut General Statutes.

5) The Commissioner shall implement this Anti-Degradation Policy by incorporating it into the review of applications for proposed permits, certifications and concurrences as listed in Section II. Compliance with Federal requirements for public participation, contained in the federal Clean Water Act (Title 40 Part 131.12(a)(2)) will be provided by the public notice and hearing requirements of Chapter 440 or 446k of the Connecticut General Statutes, Section 401 of the federal Clean Water Act or Section 307 of the federal Coastal Zone Management Act. Any such notice or notice of a hearing shall include the Commissioner's finding with regard to compliance with this Anti-Degradation Policy.